

OBSERVATIONS
ON
JAIL, HOSPITAL, OR SHIP
F E V E R,

From the 4th April, 1776, until the 30th April, 1789,

MADE IN VARIOUS PARTS OF
EUROPE AND AMERICA,

AND ON THE
INTERMEDIATE SEAS.

By ROBERT ROBERTSON, M. D.
PHYSICIAN TO THE ROYAL HOSPITAL, GREENWICH.

Opinionum commenta delet dies ; experientia judicia confirmat.

A new Edition, much enlarged and improved.

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M DCC LXXXIX.



66...1415



T O

HIS ROYAL HIGHNESS

PRINCE WILLIAM HENRY,

DUKE OF CLARENCE, &c. &c.

May it please your Royal Highness,

AS Ship Fever, which is the subject of the following Observations, has often decided the fate of nations, by depopulating cities and garrisons, by mouldering armies, and by rendering the most powerful fleets unserviceable, I presume that it claims, in a peculiar manner, your Royal Highness's attention, lest it should obstruct your pursuit of that glory, in which, the interest of your country is involved.

This

This new edition of Observations on Jail, Hospital and Ship Fever is, therefore, with great humility and profound respect, inscribed to your Royal Highness; and that your Royal Highness may long, in perfect health, be an ornament and patron of the British Navy, is the most ardent wish of,

May it please your Royal Highness,

Your Royal Highness's

Most devoted and most obedient,

Humble Servant,

R. ROBERTSON.

*Hythe, near Southampton,
18th June, 1789.*

P R E F A C E.

IMPORTANT as the facts are which are stated in the following Observations, it is feared, they will not, by some readers, be thought conducive to the improvement of medicine; and there are others, who consider diaries and reviews of Sick Lists, and of Weather, not only as dry and insipid reading, but altogether useless in practice. Such readers are to know, that these Observations, collected with immense trouble, were published to benefit mankind, and for their information who think no circumstance trivial which points to so desirable an object; nor their time ill spent, when employed in extricating themselves out of the mazes of prejudice and intricacies of misleading theories, through which, experience only can guide us on our way to truth. Without reaping
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the advantages of experience, and those to be collected from a succinct history of diseases, as they occur, we might for ever implicitly continue to follow the steps of our ancestors, by servilely adopting their maxims and practice, which, in many instances, were founded on ill-grounded hypotheses, and end our days without having once dared to think for ourselves, or to benefit mankind.

Let them, however, who dislike the meteorological tables, pass them over; in perusing the other Observations, *curiosity* may sometimes, perhaps, excite them to recur to the passages which are alluded to.

I have paid little attention to any other disease than fever in the following Observations; and, since they were first printed, having fortunately collected many more on board the Romney and Blenheim; in an extensive practice on shore for upwards of three years, in a country where fever is considered endemial; and on board of the Salisbury, for three voyages to Newfoundland, it was thought necessary to divide them, for greater perspicuity, into Six Parts.

The first contains my observations made on board the Juno; the second, those on board the Edgar, which are much enlarged, and a Monthly Review added; the third, those on board the Romney; the fourth, those on board the Blenheim; the fifth, those made on shore practice; and the sixth, those made on board the Salisbury, comprehending in all a period of near fourteen years.

The tables are now placed as I first intended and ordered them, and are, though much reduced in number, of themselves a clear and compendious historical record of the state of the sick under my care on board of his Majesty's ships for ten years: and I hope that neither the proportional nor comparative tables stand in need of an apology, as they are only intended to illustrate or state facts, without the smallest intention to introduce the practice of individuals disadvantageously; for I often repeat that I consider theirs *as the general practice*.

Without comparative views of the success of different practices, a line of distinction can never be drawn between them.

But when they are minutely and faithfully stated, no room is left for disputing which ought to be preferred. It is upon this principle only that I have inserted the comparative and proportional tables : and whoever is put in possession of such advantages, and will not profit by them, must be obdurate indeed.

I hope that the addition of the four new parts of observations will compensate the reader for transposing a great part of the introduction in the last edition, to another work, where I think it will appear with more propriety and advantage to the reader.

To render the whole as clear as it is important has been my study, and should I, unfortunately, be thought to have failed in attaining my end, I trust it will be generously imputed to the nature of the work, and the great difficulty to perform it. Should I happily succeed in impressing the mind of the reader with conviction of its importance, I shall have obtained, for many uncomfortable days trouble, the only reward I desire.

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INTRO-

INTRODUCTION

TO THE

OBSERVATIONS.

SOME professional gentlemen are of opinion, that the limits wherein my Physical Journal was composed, are too confined to render it an object of general attention or use, recommending it only to them who may be employed on the coast of Africa. How far this opinion is well or ill founded time will shew. Should mankind be disposed to treat it harshly, all that I might urge in its favour would fail to recommend it. But when the extent of an African and West India voyage, and how often this was performed, are duly considered; when the great affinity of the diseases of all hot climates is reflected on; and when the little difference which is requisite in the treatment of such diseases,

as

as are daily confirmed by the writings of later authors, are well attended to; this contracted opinion will lose much of its force, as well in speculation, as in practice; more especially should the idea of the great similarity there is in all fevers (not arising from topical affection), which fortunately is begun to be received*, be generally adopted. And Doctor Millar advances much in favour of the Journal, in asserting that bark will cure *all the ideal variety of fevers*; and thinks the comparative view of the methods of the management of the African and West India fever, with my account of the various treatment of the ship-fever, and the different success of those methods, *as stated with fidelity in the following Observations*, confirm this idea.

Be the fate of the Journal as it may, such objections will not apply to observa-

* See Dr. Lind of Haflar's new edition on Fevers and Infection, cap. ii. sect. ii. p. 264, 265; and Dr. Millar's Observations on the prevailing Diseases in Great Britain, particularly in the Army and Navy; together with a Review of that of other Countries; and arithmetical Calculations of the comparative Success of different Methods of Cure.

tions on ship-fever, or infection; an evil confined to no particular country or climate, but extending its fatal effects as far as we have either society or commerce; an evil, in destroying the effects of which, the interests of mankind are involved. He who labours to promulgate so important a fact; to detect the public evil under all its insidious appearances; and to render it less destructive than it has often proved, merits, at least, the good wishes of society.

I am aware, that in attempting to introduce innovations into the practice of a science, professed and practised by men who have deservedly become eminent by indefatigable study to serve mankind, a series of well-grounded facts, where demonstration is impracticable, will be requisite to support the innovator. Should he be a young practitioner who attempts it, it is incumbent on him to do it with deference to authority, stamped with the public sanction—unless he can prove such authority to be contradictory to the only test to be regarded in the practice of physic, experimental fact. Knowing, therefore;

therefore, that in a work of this nature and importance, hear-say evidence, or an *ipse dixit*, would have no weight, I have confined myself to a plain relation of facts, supporting these, where it is practicable, with arithmetical calculations. The reader, therefore, needs not expect to meet with any learned quotations from authors, ancient or modern, to swell the volume.

Before I proceed, it is necessary to inform the reader that *infection*, throughout the following observations, applies to the jail, the hospital, and the ship fever only; and being fully convinced that they are essentially one and the same fever; and that they are to be cured by one and the same remedy, *bark*, I shall occasionally use the terms ship-fever, fever, contagion, or infection.

The characters made use of in the Meteorological Observations are as follow :

— denotes a calm ; *, light airs ; **, fresh breezes ; ***, gales ; ****, strong gales ; v, variable ; f, from ; t, to ; b, by ; viz. f N W t S W b S, from N W to S W and by S ; n for new, and p for full moon ; c, clear ; cl, cloudy ; cb, changeable ; h, hazy ; f, foggy ; o, light showers ; oo, showers ; oeo, hard showers ; oooo, heavy rain ; d, dew ; h, hail ; s, snow ; t, thunder ; l, lightning ; f, in the column of falling weather, frost ; A M, before noon ; P M, afternoon ; f, failed ; a, anchored ; f and a, failed and anchored ; Nly, Northerly ; Sly, Southerly, &c.

OBSERVATIONS, &c.

PART I.

CHAP. I.

SECT. I.

MONTHLY REVIEW OF THE SICK LIST,
From APRIL 4, to AUGUST 31, 1776.

WHEN we failed on the 4th of April from St. Helen's, on our voyage to Quebec, the patients on the sick list were, one with fever; one with eruption; one with itch; one with inflammation; and three with foul ulcer.

The wind varied much and often, though in general it was between the Northward and Eastward, until the 12th, when it got round to

Part I.

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ESE.



E S E. From thence it veered to the S W. On the 15th it was from South to East; on the 16th, from N E *b* N to N N W, varying to N *b* E, till the 20th, when it came to S W, and varied between that and N *b* E, until the 17th. It then varied from E N E to S S E: on the 28th, and afterwards, got back to the N and N W, still varying. On the 8th, 9th, 15th, 16th, 25th, it blew gales; the 19th, and 20th, it was sometimes calm. The 11th, 12th, 15th, 17th, 21st, 22d, 23d, 24th, 28th, light showers; the 25th showers. The atmosphere was generally cloudy, sometimes clear, but seldom foggy, except when we crossed the banks of Newfoundland. The moon was full the day we failed, and changed the 18th. The mean height of the thermometer was about 57.

The sick list did not vary much, but rather increased regularly until the 23d—decreased until the 27th, when it increased; and then decreased rather, to the end of the month. The number who were added were, thirty with fever; two with scurvy; one with rheumatism; one with gout; two hectic; one with cough; one with hæmorrhoides; one
Part I. with

with eruption; four with itch; one with scald; two with strain; three with contusion; one with fracture; three with inflammation; one with swelling of the knee; two with abscess; one with excoriation; and five with ulcer:—in all, 62; including those who were on the list the day we failed.

I sent three fever patients to the hospital in the month of March. Amongst the fever patients are included those complaints which are vulgarly called colds accompanied with symptoms of fever: a number of those were slight, and easily carried off; but were so classed to avoid multiplying diseases, or columns in the general table. This is to be understood of all such cases until the month of September, only we shall take notice in the month of August of such as had severer attacks of fever, the symptoms which accompanied it, and the manner in which it was treated. Of other diseases, *it is not my intention to treat.*

M A Y.

The wind was as variable as in the preceding month, but much more Westerly, and always moderate, except the 10th, gales. On

the 1st, 2d,¹ 14th, 18th, 19th, 20th, 22d, and 28th, at times it was calm. We had heavy dews the 1st and 2d; 4th and 5th, light showers with snow; 7th, 18th, snow; 8th, 11th, 12th, 15th, 16th, 23d, and 25th, light showers; 9th, 21st, showers. The atmosphere was often very foggy, and wet every thing, particularly in the beginning of the month. Sometimes it was very hazy, at others cloudy, and seldom clear.—The moon was full the third, and changed the 17th. The mean height of the thermometer was about 47 deg. It was often very cold in the river of St. Laurence.

The number of sick first increased a little, then decreased somewhat, but varying little until the 12th, when it increased, and rather continued doing so until the middle of the month, then decreased to the 20th. From that time it varied very little until the 27th, when it began to decrease, and altered very little from the 28th to the end.—On the 8th grog was begun to be served.—At the end of the month we arrived at Quebec.

The patients added to the sick list this month were, forty with fever; one with quinsy; one
Part I. with

with plethora; one with dysentery; three with belly-ach; one with singultus; one with deafness; one with nephritis; one with hæmorrhoides; two with eruption; one with itch; seven with contusion; one with wound; two with inflammation; one with swelling of the knee; and eight with abscess:—in all, 73.

On the 24th a boy died of fever, which proceeded from a fracture in the neck of the os femoris, and ended in tetanus, or locked jaw. The day before he died, I was informed, he had hurt himself at play before he was taken ill. When he came to me first, although he complained of pain about the superior and interior part of the thigh, he firmly denied that he had received any hurt; I therefore dropt that idea, until the tetanus came on.

Nothing further material happened in the course of the month,

J U N E.

The 5th and 6th the wind varied; as it did also on the 12th, 17th, 19th, and 20th; but was then chiefly SW.—Otherwise it was NE, or ENE. Then it was SW or Westerly with calms, until the 25th, and from that time va-

ried until the end of the month; and all along, excepting the 13th and 14th, gales, it was light airs or fresh breezes. The 1st and 4th, light showers; 6th, showers with thunder; 9th, 13th, 14th, 16th, 17th, 18th, 19th, 24th, 26th, and 28th light showers, with *t* and *l*; 20th, light showers, with *bt* and *l*; 22d, showers, *bt l*; 23d, showers, *tl*. The atmosphere was often clear, especially in the beginning, but was more generally cloudy throughout the month. The 3d the moon was full, and changed the 16th.

Excepting the first day, the sick list rather decreased until the 8th, when it increased, and the following patients were sent to the hospital;—one with fever (a weak man); one with scurvy; one with gout; two with cough; one with epilepsy; one with eruption; and three with ulcer. It increased until the 12th, decreased until the 15th, increased until the 18th, varied little until the 27th, and decreased again.

The patients who complained this month were, sixteen of fever; one of pleurisy; five of dysentery; two of scurvy; one of rheumatism; two of gout; one with hæmorrhage; two with cough; one with epilepsy; one with

Part.

itch;

itch; one with rupture; eight with contusion; and one of excoriation:—42 in all.

The ship's company were served fresh beef on Saturdays and Sundays; and spruce beer after the 8th.—The hospital was a shocking house, and under a very high hill, close to the river on the Point Levi side. Before we arrived, the sick seamen were taken into the general army hospital.—On the 24th, the pleuritic patient was sent to the hospital in a convalescent state; and seven of them who were sent on the 8th, returned on board; and on the 25th I applied to have them invalided. Two of the fever patients were sent small-pox patients to the hospital: one of them, who was seized several days before with the symptoms which commonly appear before the eruption, had seen a man ill of the small-pox at the hospital, who died there; but they are classed fever patients, because it was uncertain if it was the small-pox.—Thirteen in all were sent to the hospital.

On the 8th the patient died of singultus.

Every thing at market was very dear. Scarce any sort of vegetables.

J U L Y.

Excepting the 2d and 16th, when it was ENE, the wind varied backwards and forwards from S b W round to NW, until the 18th, with moderate gales; from the 9th to the 16th calms A M. It then got round to the NE, till the 21st, when it varied, and was calm part of the day. It again came to SW, blowing moderately with little variation until the 29th; A M commonly calm, after which it was variable. 1st, light showers, *t l*; 2d, ditto, *l*; 4th, 11th, 12th, showers, *t l*; 5th, 17th, 22d, 24th, 26th, 28th, 31st, light showers; 7th, *l*; 9th, 16th, showers; 21st, light showers, *t*; 29th, hard showers. The atmosphere was cloudy and clear alternately, but not quite regularly so every other day. The moon was full the 1st, changed the 15th, and was full the 30th. The mean height of the thermometer was about 66 deg.—It was lower in the city at noon, than in the lower town, or on board of our ship.

The sick list varied little, but increased towards the middle of the month; from which time it decreased until the 26th, when it in-

Part I.

creased;

creased; decreased for two days again, and increased to the end.

The patients who complained this month were, seven of fever; one of dysentery; one of belly-ach; three of scurvy; two of rheumatism; one of sore throat; four of cough; one of epilepsy; one of strain; five of contusion; one of fracture; one of wound; one of inflammation; two of abscess; and one of ulcer:—32 in all. So that as the weather became mild and warm, the sick list decreased.—But this will be more attended to next month.

We had some marines sent on board a transport to guard prisoners.—Every thing ashore at market, except vegetables (which were still scarce, became much cheaper. The scurvy had hitherto been the most prevalent disease in the hospital, since it was established. The Triton sent a number of scorbutic patients to it; but the men having got spirits to buy at the Brunswick camp, which was on the top of the hill, lived irregular. Very few were seized with small-pox ashore. I sent two scorbutic patients to the hospital, one with small-pox, and one with fever.—Towards the end of the month, the Pearl returned from a cruise in
the

the Gulph, with many of the people scorbutic: they had blowing foggy weather. We were now served fresh beef three times a week.

The Brunswick troops had a very mortal fever among them; the following short account of it I had from the surgeon general to the garrison.

“ That they were generally bad three days before they were brought to the hospital; that they were then delirious, with their tongues black and chopt, and their teeth covered with fordes; that they had petechiæ, and a flux on them; and that they generally died within 48 hours after their admission. That he observed no remission of the fever; that their pulses never indicated a strong fever, nor even danger; but all who were so ill at their admission as not to be able to put out their tongues to show them when desired, died. That he ordered them, as soon as they were admitted, to be well washed in warm water and vinegar, and the bark to be given them freely, with Port wine.” And concluded with saying, upon my enquiry if he had made use of blisters, “ That he did not approve of them in fevers with petechiæ; but that he perhaps might have applied them,

Part I. had

had the patients been brought to the hospital when they were first taken ill."

AUGUST.

The 1st and 2d the wind was variable, but Easterly; from the 3d to the 8th, it was from W S W to S W, varying a great deal; but still more from the 8th to the 11th, when it came to the Eastward, and continued so until the 14th; it then veered to the S W, continued there until the 26th, varying little the last six or seven days. Now it veered from W N W to E N E, and continued there, with little variation, until the last day of the month, when it got to the W S W.—All the month was moderate, and on the 2d, 14th, 15th, 21st, 30th, and 31st, at times calm; 2d, 3d, light showers, *t l*; 7th, 8th, 9th, 13th, 25th, light showers; 16th, 21st, showers, *t l*. Until the 21st, the atmosphere was very seldom otherwise than clear; but the 18th was foggy and hazy; from that time until the end, it was almost cloudy or hazy; 26th and 28th, sometimes foggy. The moon was new the 14th, and full the 29th. The mean height of the thermometer was 65 deg. But it is to be observed,

served, that we left Quebec the 23d, and that the thermometer became gradually lower as we got down the river, so that in eight days it was 9 deg. lower than it was the day we left Quebec: it continued lower while we were at Bique-island.

On the 5th, two of our men, one with scurvy (one of the marines that were on board the transport), the other with fever, were sent to the hospital; and one with cough on the 13th.—The list decreased until the 16th, when it increased, varied for two days, and decreased on the 19th, then continued without alteration until the 23d, when our four men came from the hospital; after which it varied until the end, but rather increased.

On the 13th, two of our men were invalided by survey. We were served fresh beef every meat-day, some time before we left Quebec. The 26th we arrived at Bique-island, where our men were employed to cut wood for the ship's use—and sailed from thence on the 31st.

The patients who were added to the list were, three with fever, one with head-ach, nine with dysenteric complaints, two with

Part I.

belly-

belly-ach, one with scurvy, one with rheumatism, one consumptive or hectic patient, two with sore throat, three with cough, one with deafness, one with giddiness, one with eruption, one with strain, one with contusion, three with wound, one with inflammation, one with abscess, and one with furuncle :— in all 34.

S E C T. II.

Observations on the FEVER of the preceding Months.

WE are now come to a period wherein a very important change of the health of the ship's company began to appear ; but it may not be improper first to enumerate the symptoms of the fever which hitherto affected the people, that they may be compared with those which occurred in the ensuing months. However, it is not intended to draw this comparison at present to minuteness, but to represent, if possible, the characteristic marks of ship-fever, as inserted in the introduction. The particular description

description thereof will more properly follow the diary of the sick list and monthly review.

Many of those who in the preceding months are ranged as fever patients, were so slightly affected, as to bring them, not very improperly, within the vulgar denomination of colds; although, as they had all at least *some* feverish symptoms, for the reason before-mentioned, I have classed them as fevers, to avoid the multiplying of columns of diseases in the tables, as already mentioned.

The symptoms of such patients were mild intermitting complaints. The pulse was very different in different patients; thirst, loathing of food, sickness at stomach, head-ach, cough, sore throat, hoarseness, acute pains of the sides, pain of the back, and in all their bones (as they express themselves), or universal pains, straitness about the breast, griping complaints, deafness accompanying a sore throat (though this was very seldom), giddiness, especially in the month of May, and constipations.

I thought it necessary to take away blood in some cases only. Gentle evacuations by vomit and stool, promoting a moderate diaphoresis with essence of antimony or tartar emetic, to-

Part I.

gether

gether with opium, or tinct. theb. sometimes; bolusses of sperma-ceti and nitre, or the oily mixture, repeated as there was occasion, with diluting drink, and the volatile liniment applied to the throat, carried their complaints off in a few days.

Although those were the most general symptoms, yet many had the fever in a feverer manner, as appears from the symptoms and their duration, which are collected from *all their cases*, and enumerated daily. But neither the pleuritic case, nor two others (which were occasioned by putting a corpse into a coffin) are made mention of; though these two indeed were slight. It is not, therefore, to be understood that all the symptoms which are enumerated in any one day, occurred in a single case.

1. They were seized with chillness and rigors, succeeded by heats, thirst, and universal pains and uneasiness; pains in the side and back, difficulty of breathing, tightness about the throat, great hoarseness, cough, head-ach, giddiness, and sickness at the stomach; the pulse quick and full.

2. Some had very restless nights, without any remission from head-ach, and a pain that went round in the direction of the diaphragm; especially with cough, which was dry and urgent; and from pain of the breast that affected respiration, the countenance was flushed, and the eyes watered; remissions, paroxysms, costiveness, profuse sweats, the thirst continued, and the pulse was in some full and quick.

3. The paroxysms continued above twelve hours, with the symptoms as severe as in the first paroxysm; pains in the knees, and about the shoulders, a frequent cough, and scarce any expectoration; a little cough, and pain only.

4. Though cool, there was a dry, urgent cough, with pain at the scrobiculus cordis; the remission continued six hours, and the next paroxysm eight. Stiffness about the eyes, weakness, pain of the breast, and head-ach from cough, though expectoration began.

5. Profuse sweat the preceding night, a very teasing cough, weakness, with much pain about the breast, and either no expectoration, or a difficult one in some cases; no appetite, and the tongue white.—On the 5th, of the
Part I. flight

slight fever, the pulse of a man who was subject to epilepsy, became quick and full, with giddiness and head-ach.

6. In the epileptic case there was a degree of stupor.—P M an accession of fever; the skin was hot and dry, the tongue parched; thirst; large quantities of urine, and languor; though some were recovering.

7. In the epileptic case, the paroxysm went off in the night, by a large quantity of urine, and a copious stool. P M a paroxysm came on—an accession of fever happened after the patient had been in a recovering state for four days,—weakness—recovering slowly.

8. A difficult respiration, with cough—pain of the back and weakness—some recovering—the paroxysm of the epileptic case ended as the preceding. P M a paroxysm came on.

9. Cough and hoarseness continued—the epileptic patient uncertain when the paroxysm left him, and complained of his back.

10. A free expectoration, and recovering—the epileptic man passed an indifferent night; his head ached and was giddy, and his mouth and tongue were foul,

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11. The



11. The epileptic patient had shooting pains in his head at times, but was recovering.— One recovered. *

12. It was discovered that the epileptic patient was very lousy, though recovering.— Hoarseness continued—weakness.

13. It was a considerable time before he recovered his spirits, and he was invalided the 25th of June.

18. One patient continued weak, and was sent to the hospital; but this man had hurt his breast not long before by a fall.

* TIDFORD, by bark.

The Method of Cure.

IT was not a general rule with me to let blood;—that depending solely on circumstances. A vomit was most commonly given at first; and if the patient was bled, the vomit was given a few hours after, and from xxv. to xl. drops of Effent. Antimon. with refrigerating and diluting drink at night. Next morning an ounce of salts was given, and the effence of antimony repeated in the evening. After those moderate evacuations (which were seldom repeated) I prescribed Cort. Peruv. ʒi. or ʒiſs. every hour, until the patient was out of danger; and afterwards it was given less frequent, and at this time Elix. Vitr. was often joined with it. After I began to give the bark, I did not omit it for any exacerbation of the symptoms.

C H A P. II.

S E C T. I.

A

D I A R Y

O F T H E

W E A T H E R,

From SEPTEMBER 1, 1776, *until* JUNE 30, 1777.

Year, M & D. y.	Therm.	Latitude, or, different parts.	Long. in or made.	Age.	Winds.	Appear. of the Atmosph.	Rain, dew thunder, hail, snow, &c.
1776 Die Sab. Sept.	60	Off Cape Moriere, 48° 58''		19	v W b S *	cl	o
2	60	a & f		20	v S W b W *	ch	
3	63	Hills- burgh bay		21	v N W b W *	ch	
4	65			22	v S E b E * *	cl	o
5	61½			23	v S E b E * *	cl	
6	61	f		24	N v * *	ch	o
7	63	Off Madame		25	N v —	c	
8	64	44 45	00° 51' W	26	f S S W t W * * * *	cl f	o o
9	61	Off Cape Breton, 45 23		27	N W * *	c	
10	61½	44 42 a pm. Beaver- harbour.		28	f N W t S W * *	ch	
11	63½			29	S * *	f cl	o
12	60	am. f		n m	N N W *	c	
13	63½	am. a Halifax, 44 45	in 64 35 W	1	S W v *	c	
14	65			2	v * *	cl	
15	65			3	v W b S *	h f	o o

Year, M. & Day.	Therm.	Latitude, or different parts.	Long. in or made.	D's Age.	Winds.	Appear. of the Atmosph.	Rain, dew, thunder, hail, snow, &c.
1776 Sept. 16	56			4	NW * *	c	
17	56½			5	NW * *	cl	
18	63			6	v W *	ch	
19	64			7	v NNW *	c	
20	61½			8	NW b N *	c	
21	64			9	S v *	cl	
22	65½			10	v SW *	ch f E c	o o
23	64½			11	SSE *	ch f E c	
24	57½			12	NNW *	f	o o o
25	57½			13	NNW * * *	ch	o
26	59½	f		14	W * *	c	
27	60½	44° 06''		P	SW v * *	cl	
28	55½	43 29		16	NNW * *	c	
29	55½	43 30 a pm Le Have		17	v * * *	ch	
30	59			18	SSW * *	f	

Year, M. & Day.	Therm.	Latitude, or different parts.	Long. in or made.	D's Age.	Winds.	Appear. of the Atmosph.	Rain, dew thunder, hail, snow, &c.
1776 Oct 1 Die Mart	59 $\frac{1}{2}$	am. f		19	NW *	c	
2 1	54	43° 49''		20	WNW v * *	c	
3	56	42 50	00° 33'' W made.	21	ESE v * *	c	
4	58 $\frac{1}{2}$	42 36	01 09 W	22	ESE v * *	f	o
5	58	42 42	01 01 W	23	ENE * *	ch	
6	54 $\frac{1}{2}$	42 56	01 03 W	24	ENE v *	ch	o
7	59	43 15	01 56 W	25	E v * *	ch	
8	58 $\frac{1}{2}$	43 03	01 49 W	26	SE v *	ch	
9	60 $\frac{1}{2}$	42 58	01 56 W	27	WSW *	ch	o
10	60	43 07	00 06 E	28	NNW v * *	ch	o
11	53 $\frac{1}{2}$	44 06	01 04 E	29	v NbW * *	cl	o
12	49	44 09 pm. a Halifax		n pm	WSW * *	c	
13	53			1	WSW v * *	c	
14	53			2	WNW *	cl	h f
15	53			3	v * *	c	

Year, M. & Day.	Therm.	Latitude, or different parts.	Long. in or made.	D's Age.	Winds.	Appear. of the Atmosph.	Rain, dew, thunder, hail, snow &c.
1776 Oct. 16	54			4	S b E — *	ch	
17	58 $\frac{1}{2}$			5	v * —	cl	o o
18	61 $\frac{1}{2}$			6	SE v * *	cl	
19	58 $\frac{1}{2}$	am. f		7	W v * *	cl	o
20	57 $\frac{1}{2}$	Le Have 43° 50'		8	NW v *** .. *	cl	
21	58 $\frac{1}{2}$			9	SW v * * *	cl	
22	53			10	NW b W v * * *	cl	o
23	52	am. f 44 01 pm. a Le Have		11	WNW WSW v * *	h	
24	58			12	SW v * *	cl	
25	61			13	SW v * *	f	o o t l
26	60	am. f 44 03		14	NE v *	ch	o
27	57 $\frac{1}{2}$	43 10	00° 51' W	p am	NW v *	f	
28	55 $\frac{1}{2}$	43 47 off Cape St. Mary		16	v * *	ch	o
29	53	43 46	01 10 W	17	NNW v * . * *	ch	o
30	47	Bay of Fundy pm. a		18	NNW v * . * *	cl	
31	50			19	S W * * *	ch	o o

Year, M. & Day.	Therm.	Latitude or different parts.	Long. in or made.	D's Age.	Winds.	Appear. of the Atmosph.	Rain, dew, thunder, hail, snow &c.
1776 Nov. 1 Dic Ven.	58½			20	v NNW *	ch	o
2	52			21	WNW v * . * *	cl	o o
3	46½	am. f		22	v NNW * . * *	cl	f o
4	46½			23	v SW * . * *	cl	f
5	52	Off Anna- polis pm. a		24	SW v * . * *	cl	
6	56			25	SW * —	cl	
7	55½	am. f		26	NE * . * *	f	
8	56	43° 15'		27	Nly v * *	h	
9	54	Cruising		28	v NNE *	h	
10	57	Off Segvin a		29	v W * —	h	
11	55	43 29	00° 51' E made	n am	ENE v * *	ch	
12	49½	43 20		2	f NNE NNW * *	ch	
13	50			3	NW v *	c	
14	49	43 58		4	NW v * *	c	
15	49½	3 1		5	Nly v * —	cl	

Year, M. & Day.	Therm.	Latitude, or different parts.	Long. in or made.	D's Age.	Winds.	Appear. of the Atmosph.	Rain, dew, thunder, hail, snow, &c.
1776 Nov. 16	50 $\frac{1}{2}$	43° 48''		6	S W v * . * *	c	
17	48 $\frac{1}{2}$	43 20		7	f N b E t NW * *	c	
18	46 $\frac{1}{2}$	42 54	01° 05'' E made	8	Nly v *	c	
19	48 $\frac{1}{2}$	43 00	02 40 E	9	Nly v *	cl	
20	52 $\frac{1}{2}$	43 20		10	v *	cl	
21	55	43 32		11	SW v * . * *	c	
22	55 $\frac{1}{2}$	Halifax am. 3		12	SW v * . * *	cl	
23	57			13	SW *	cl	o
24	58			14	S b E v * —	h	o
25	57			15	SE *	f	
26	59			16	SW * *	f	
27	60			17	NNW * —	f	o
28	56 $\frac{1}{2}$	pm. f & a		18	NW v * . * *	ch	o
29	52 $\frac{1}{2}$			19	Wly *	c	
	55			20	ESE v * *	f	o o

Year, M. & Day.	Therm.	Latitude, or different parts.	Long. in or made.	D's Age.	Winds.	Appear. of the Atmosph.	Rain, dew thunder, hail, snow, &c.
1776 Dec. 1 Die Sab.	55			21	v * *	cl	o
2	51			22	WNW v * *	cl	f o
3	45			23	v NW *	ch	f o
4	53			24	SSW v * *	ch	o o
5	49			25	NW v * *	cl	
6	46½	f		26	Nly v *	c	
7	51	43° 27''	00° 34' E made	27	Wly v * *	cl	
8	53½	42 25	00 48 E	28	Wly v * *	cl	
9	51½	41 24	00 21 E	29	NNW v * * *	cl	
10	49	40 22	00 08 W	n	N v * * *	cl	o f h
11	55	39 12	00 42 W	1	NNW v * *	ch	o
12	57½	39 17	02 50 W	2	SE v * * *	cl	o
13	61½	38 34	03 30 W	3	NNE v * * *	cl	
14	63	39 45	04 24 W	4	v W * * *	cl	o
15	54½	39 13	in 04 13 W	5	NNW v * * *	cl	
16	59	39 15	04 36	6	W v * * *	cl	o o

Year, M. & Day	Therm.	Latitude, or different parts.	Long. in or made.	D's Age.	Winds.	Appear. of the Atmosph.	Rain, dew, thunder, hail, snow, &c.
1776 Dec. 17	56 $\frac{1}{2}$	38° 53''	05° 41''	7	NE v * *	ch	o
18	58	38 06	07 30	8	f WbN t NWbW * * *	cl	
19	55 $\frac{1}{2}$	37 45	07 02	9	N * * *	cl	f
20	57 $\frac{1}{2}$	37 34	08 12	10	N v * *	cl	o
21	63	39 15	09 04	11	SE v * * *	cl	o o l
22	56 $\frac{1}{2}$	39 52	08 36	12	v WbN * * *	cl	f o
23	53 $\frac{1}{2}$	40 01	08 07	13	NWbW v * *	cl	
24	51 $\frac{1}{2}$	38 34	08 56	14	Nly v * *	ch	
25	50	38 54	10 07	15	NE v * *	cl	
26	56	40 12	11 15	16	EbN v * * *	cl	o o
27	54	39 45	10 51	17	NW v *	ch	
28	51	39 35	11 20	18	NNW v * *	cl	f
29	46 $\frac{1}{2}$	39 30	12 57 W	19	N v * *	cl	
30	50 $\frac{1}{2}$	Off Egg island.		20	SW v *	h	
31	50 $\frac{1}{2}$	Sandy Hook. pm a.		21	ENE v *	cl	

Year, M. & Day.	Therm.	Latitude, or different parts.	Long. in or made.	D's Age.	Winds.	Appear. of the Atmosph.	Rain, dew thunder, hail, snow, &c.
1777 Jan. 1 Dic. Mer.	53	f N. York a North River		22	SE *	cl	
2	46 $\frac{1}{2}$			23	NW **	c	
3	42 $\frac{1}{2}$			24	NW *	cl	f
4	42 $\frac{1}{2}$			25	NWN **	cl	f
5	41 $\frac{1}{2}$			26	NW *	cl	f
6	41			27	NW *	c	f
7	38 $\frac{1}{2}$			28	NWN **	c	f
8	38			29	NWN **	cl	f
9	39			n am	WNW **	cl	f
10	36 25			2	NWW *	cl	f
11	39			3	WNW v **	cl	f
12	39			4	NW **	c	f
13	39 $\frac{1}{2}$			5	NW **	c	f
14	39 $\frac{1}{2}$			6	NW **	c	f
15	41 $\frac{1}{2}$			7	WNW **	c	f

Year, M. & Day,	Therm.	Latitude, or different parts.	Long. in or made.	D's Age.	Winds.	Appear. of the Atmosph.	Rain, dew, thunder, hail, snow, &c.
1777 Jan. 16	48			8	SW **	<i>h</i>	<i>f</i>
17	44			9	NW **	<i>c</i>	<i>f</i>
18	42			10	NNW **	<i>c</i>	<i>f</i>
19	43			11	S **	<i>h</i>	<i>f</i>
20	46			12	NW SW **	<i>ch</i>	
21	52 F			13	<i>f</i> SSW NW *	<i>ch</i>	
22	46			14	N <i>v</i> *	<i>cl</i>	
23	45			15	<i>v</i> *	<i>h</i>	<i>f</i>
24	48½			16	<i>v</i> *****	<i>cl</i>	o o
25	52½			17	W <i>v</i> *	<i>cl</i>	
26	52			18	NE <i>v</i> *	<i>cl</i>	
27	50½			19	<i>v</i> *	<i>cl</i>	
28	48			20	NE *	<i>cl</i>	
29	47½	New York		21	NE <i>v</i> *	<i>h</i>	<i>f</i>
30	46½			22	NW NNW **	<i>cl</i>	<i>f</i>
31	47			23	NW <i>v</i>	<i>ch</i>	

Year, M. & Day.	Therm.	Latitude, or different parts.	Long. in or made.	D's Age.	Winds.	Appear. of the Atmosph.	Rain, dew thunder, hail, snow, &c.
1777 Feb. 1 Die Sat.	46 $\frac{1}{2}$			24	W *	c	
2	50 $\frac{1}{2}$	f & a bet. L. Island & N. York		25	SW •	cl	
3	47	f		26	NW *	c	
4	42 $\frac{1}{2}$	41° 08' 11 pm. a off Gardiners island.		27	N v * —	c	f
5	47	f & pm. a Rhode Isl.		28	S v * *	h	
6	39			29	NW * *	c	f
7	39			n	NW * * *	c	f
8	43			1	SE * *	cl	o f
9	47			2	NW * * *	c	
10	46 $\frac{1}{2}$			3	SW * *	ch	
11	43			4	v f SE NE * * *	ch	o o f f
12	40			5	WNW * * *	cl	
13	34	f		6	E v *	c	f
14	39 $\frac{1}{2}$	Off Long island.		7	v NNE * *	cl	f

Year, M. & Day,	Therm.	Latitude, or different parts.	Long. in or made.	D's Age.	Winds.	Ap. ear. of the Atmosph.	Rain, dew, thunder, hail, snow, &c.
1777 Feb. 15	38	pm. a Block isl.		8	v NW * *	cl	f
16	39 $\frac{1}{2}$	am. f		9	WNW v * *	cl	f
17	43 $\frac{1}{2}$	Cruising.		10	NW *	h	f
18	42 $\frac{1}{2}$			11	NW * *	cl	f
19	35			12	f N, NW *	c	f
20	29 $\frac{1}{2}$	Block isl. pm. a		13	NW * *	e	f
21	29	am. f		14	NW * —	cl	f
22	38	Cruising.		P	NNW v *	ch	f
23	41 $\frac{1}{2}$			16	NNE v * *	h	f
24	44	39° 50''	00° 09'' E	17	v E * * *	ch	o o f
25	42 $\frac{1}{2}$	39 27	00 50 W	18	NNW * * *	cl	o f
26	44	39 51	00 25 W	19	WNW * *	c	
27	43			20	WSW v *	ch	
28	38	40 20		21	NW v *	ch	f

Year, M. & Day.	Therm.	Latitude, or different parts.	Long. in or made.	D's Age.	Winds,	Appear. of the Atmosph.	Rain, dew thunder, hail, snow, &c.
1777 Mar. Die Sat.	38 $\frac{1}{2}$			22	NWbNv * * *	f	f
2	34 $\frac{1}{2}$			23	NE v * *	ch	f
3	36	40° 42' /		24	v * *	c	f
4	47	pm. a Block isl.		25	f WSW t SWbS * *	ch	f
5	36	f		26	WNW v * *	ch	o f
6	41 $\frac{1}{2}$	Cruising.		27	E v * * *	h	o o f
7	44 $\frac{1}{2}$			28	N v * *	h	o o f
8	46			29	v *	h	
9	48			n m	f SSW t SSE *	h	o
10	47			2	WSW *	c	
11	47			3	v SSW *	c	
12	47 $\frac{1}{2}$			4	f SSE t SWbW * *	f	o
13	49			5	f NNE t NWbW * *	ch	o o
14	47	Rhode isl. pm. a		6	NW v * *	c	
15	47			7	SW * *	h	
16	48 $\frac{1}{2}$			8	SW v * *	h	

Year, M. & Day.	Therm.	Latitude, or, different parts.	Long. in or made.	D's Age.	Winds.	Appear. of the Atmosph.	Rain, dew thunder, hail, snow, &c.
1777 Mar. 17	49	am. f pm. a Block isl.		9	Wly * *	c	
18	47	am. f Long isl. pm. a		10	W S W * *	c	
19	47	Plum isl. a am.		11	Wly *	c	
20	48	Sheller isl. f am. & a		12	Ely * * *	f	o o o
21	48 $\frac{1}{2}$			13	Wly * *	c	
22	48			14	f W b N t S W * *	c	
23	47			P	Wly * *	c	
24	47			16	f S W t N W *	cl	
25	45 $\frac{1}{2}$			17	N W * *	c	
26	41			18	N W * *	c	f
27	42 $\frac{1}{2}$	Rhode isl am. f pm. a		19	N W * *	c	
28	35			20	N W * *	c	f
29	41			21	S W * *	cl	o
30	46 $\frac{1}{2}$	Off Pru- dence f & a		22	S W *	ch	
31	48 $\frac{1}{2}$			23	N W v * *	ch	o

Year, M. & Day,	Therm.	Latitude, or different parts.	Long. in or made.	D's Age.	Winds.	Appear. of the Atmosph.	Rain, dew thunder, hail, snow &c.
1777 April 1 Die Mar.	47			24	SW *	ch	
2	47			25	Nly *	c	
3	48 $\frac{1}{2}$			26	v *	f	o o
4	42			27	NW * *	c	f
5	42 $\frac{1}{2}$			28	NW SW * *	c	f
6	46 $\frac{1}{2}$			29	Sly * *	c	
7	47 $\frac{1}{2}$			n	SSW * *	h	
8	49 $\frac{1}{2}$			1	SSW * *	h	
9	51			2	v *	h	
10	50 $\frac{1}{2}$			3	v * —	f	o
11	51 $\frac{1}{2}$			4	NW v * *	ch	o
12	51 $\frac{1}{2}$			5	v *	c	
13	52			6	Sly * *	cl	o o
14	55			7	* * * NW	c	
15	46			8	NW •	c	f

Year, M. & Day.	Therm.	Latitude, or different parts.	Long. in or made.	D's Age.	Winds.	Appear. of the Atmosph.	Rain, dew, thunder, hail, snow, &c.
1777 April 16	48½			9	Sly *	h	
17	51½			10	Nly *	h	o
18	52			11	v **	f	o
19	52			12	E v *	f	o
20	51½			13	NE * *	f	
21	52			14	v *	f	
22	52			15	Sly *	f	
23	55			16	NE * *	h	
24	55			17	Nly * *	h	
25	54			18	N * *	h	o
26	52			19	Sly *	h	o
27	52			20	Nly v *	ch	o
28	51			21	NW *	c	
29	48			22	v *	cl	
30	48			23	NW SW * *	cl	

Year, M. & Day.	Therm.	Latitude, or different parts.	Long. in or made.	D's Age	Winds.	Appear. of the Atmosph.	Rain, dew thunder, hail, snow, &c.
1777 May 1 Die Jovis	48			24	SE Nly * * *	cl	o o
2	47 $\frac{1}{2}$			25	N W * *	c	
3	50			26	S W *	c	
4	53			27	Sly *	ch	o
5	54			28	Nly v	ch	o o
6	55			29	Nly *	c	
7	53 $\frac{1}{2}$			n	SE * *	h	o
8	54 $\frac{1}{2}$			1	Sly *	h	
9	54			2	NE *	cl	o o
10	54			3	Nly *	cl	
11	53			4	v *	cl	o
12	48			5	N W v * *	ch	o
13	48 $\frac{1}{2}$			6	N W * *	cl	b
14	50 $\frac{1}{2}$			7	S W * *	c	
15	53			8	S W * *	c	
16	55			9	Sly * *	ch	o o

Year, M. & Day	Therm.	Latitude or different parts.	Long. in or made.	D's Age.	Winds.	Appear. of the Atmosph.	Rain, dew, thunder, hail, snow, &c.
1777 May 17	55 $\frac{1}{2}$			10	Sly * *	ch	o
18	56 $\frac{1}{2}$			11	Sly *	cl	o
19	58 $\frac{1}{2}$			12	Sly *	cl	o
20	59			13	v *	cl	o
21	58 $\frac{1}{2}$			14	v * *	c	
22	57			p	NW * *	c	
23	58			16	NW * *	c	
24	60			17	Sly * *	c	
25	59 $\frac{1}{2}$			18	Nly * *	c	
26	59			19	Nly * *	h	
27	54 $\frac{1}{2}$			20	NE * * *	ch	
28	55 $\frac{1}{2}$			21	v * *	c	
29	59 $\frac{1}{2}$	am. f pm. a		22	Sly *	c	d
30	59 $\frac{1}{2}$	f & a		23	Sly *	c	
31	63	New Port		24	Sly * _	c	

Year, M. & Day.	Therm.	Latitude, or different parts.	Long. in or made.	D's Age	Winds,	Appear. of the Atmosph.	Rain, dew thunder, hail, snow &c.
1777 1 Dec Sab. Junii	64			25	Sly * —	c	
2	63	pm. f		26	SW * —	ch	
3	62½	40° 41'	00° 24'' E made	27	WSW * *	f	l
4	62½	40 05	02 04 E	28	NW v *	c	
5	59½	41 51	02 50	n	SW v * *	c	
6	59	42 55	02 31	1	Wly * *	c	
7	60	43 28		2	NNW v * —	cb	
8	60	42 28		3	v * *	h	
9	60½	42 04 Off Cape Cod.		4	SE *	h	o
10	60	42 04		5	SSE * —	ch	
11	62	Off Cape Cod.		6	Nly *	h	
12	61½	42 50	00 46 E made	7	SE v * *	f	o
13	59	42 54	01 00	8	NE v * *	f	
14	59	Cruising.		9	v *	c	
15	61			10	Sly * —	cb	

Year, M. & Day	Therm.	Latitude, or different parts.	Long. in or made.	D's Age.	Winds.	Appear. of the Atmosph.	Rain, de thunder, hail, snow, &c.
1777 June 16	62 $\frac{1}{2}$			11	SSW v *	f	o o t
17	63 $\frac{1}{2}$			12	v *	ch	o t l
18	62 $\frac{1}{2}$	42° 14"		13	v * *	ch	
19	62 $\frac{1}{2}$	42 00	00° 39" E	14	Nly v *	ch	
20	62	42 00	01 12	P	Nly v *	ch	
21	63	42 10	00 38	16	Nly *	ch	
22	61 $\frac{1}{2}$	41 17		17	Ely v * *	ch	
23	60	Cruising.		18	Sly * * *	ch	o
24	61	42 02		19	S * *	ch	o
25	63 $\frac{1}{2}$	42 31		20	WNW v *	h	
26	63 $\frac{1}{2}$	42 26		21	SW v *	h	l
27	67	pm. Cape Cod Bay.		22	Sly * *	cl	
28	68 $\frac{1}{2}$	Cape Cod Harbour.		23	SSW *	h	
29	68			24	Sly v *	h	
30	68 $\frac{1}{2}$			25	Sly v *	h	

SECTION II.

A DIARY of the SICK LIST, with such Occurrences as might be supposed to affect the Men's Health, from Sept. 1, 1776, till June 30, 1777.

SEPTEMBER.

1. **T**HERE were on the sick list, two with dysentery; one with scurvy; one with sciatica; one with consumption, or hectic; one with cough; one with deafness; one with strain:—8 in all.—We were now sailing down the river St. Laurence.

2. The patient with sciatica, and the other with strain, recovered: 6 remained on the list. We caught a few cod, and anchored for two hours off the island of St. John.

3. No alteration of the sick list.—Off Hillsborough-bay at anchor. A M a boat was sent up the river after the Lizard, with orders for Capt. Mackenzie.

4. One of the dysenteric patients recovered, and three were added to the list with dysenteric
Part I. teric

teric symptoms:—8 in all. Weighed, and anchored in the bay.—Nothing to be bought on shore, the rebels having plundered the few inhabitants of every thing.—A fever on board the Lizard, and likewise on shore.

5. The patient with deafness recovered; and one with abscess was added:—8 on the list. They are eat up with field-mice on shore.

6. One of the patients who were added the 4th, recovered; and one complained of ophthalmia:—8 on the sick list. The inhabitants say, that they caught the fever from the Lizard, or an armed vessel that was very sickly, which the Lizard relieved; and I have since been informed, it was from that vessel that the Lizard's people got the infection. We bought a few bad and very dear vegetables, and a little milk for the scorbutic patient, a boy.—Sailed at noon.

7. Another of those who were added to the list on the 4th, is well,—7 remain. A M we failed through the gut of Canceaux; and P M we caught a few cod opposite Isle Madame.

8. One complained of dysentery, and one
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of abscess :—9 on the list. A very disagreeable day.

9. One complained of contusion :—10 on the list. We caught a few fish off Cape Breton.

10. The flux patient of the 8th recovered ; one complained of dysentery, as did also the patient with the cough ; and one of fever, who belonged to the cutter, and had been on board the Lizard :—12 on the sick list. Query, Do the fish our men catch contribute to the dysenteric symptoms among them ?—P M we anchored in Beaver Harbour ; one family, on shore at this place, only.

11. The patient added yesterday with the fever, is well :—11 on the list. Our men caught plenty of fish alongside of the ship, and trucked with the fishermen for dry fish, milk, and potatoes. An Indian and his squaw came on board.

12. The patient who complained on the 10th of the dysentery, is well :—10 on the list. A M we sailed.

13. No alteration in the sick list. We anchored in Halifax harbour ; the Milford, and three armed vessels, here.

Part I.

14. The

14. The other patient of the 4th, one of the 5th, and one of the 8th, with abscess, and another of the 10th, with head-ach, recovered:—6 on the list.

15. No alteration of the sick list; we were served fresh beef; forty of our men sent up into the wood on duty, with two gentlemen of the quarter-deck and a serjeant.

16. One complained of fever yesterday P M, who had two paroxysms before he complained: am informed that he was one of the cutter's crew, the boat which was on board the Lizard at St. John's:—7 on the sick list. Spruce beer was begun to be served to the ship's company. I proposed to the captain to have a tent erected on shore for the sick, but he would not allow it.—Many of our people, especially the marines, got drunk, were ungovernable, and staid on shore all night.

17. The patient who was added yesterday recovered. Three complained of dysenteric symptoms:—9 on the list.

18. One complained of hæmorrhoides sanguinosæ:—10 on the list. The men have fresh beef served them four times a week, and

soft bread. The scorbutic patient very ill; men sent to-day to the wood.

19. The other dysenteric patient, who was on the list the 1st (he was added the 29th ult. with head-ach), and one of those added the 27th, recovered. One complained of wound, one of strain, and one of contusion:—11 in all.

20. Another of those added the 17th, is well. One complained of dysentery:—11 on the list. Some of the sick sent ashore to walk.

21. The patient of the 18th recovered; and one added with strain:—11 in all. His Majesty's ship Rainbow came in from New-York.

22. The patient who had an old cough, returned to duty; and the other of the 17th, is well. Two added with fever, one of whom was returned well on the 19th, only; he formerly belonged to a boat; the other was one of the long boat's crew, I believe, and was on board the Lizard:—11 on the sick list.

23. One complained of the belly-ach,---12 on the sick list.

Part I.

24. The

24. The contused patient of the 19th, well; three with dysenteric symptoms added to the sick list:—14 in all. A very wet, disagreeable day.

25. The patient added the 20th, and two of those added yesterday, are well; one complained of wound:—12 on the sick list.

26. One of those added the 22d, recovered, and the other patient of the 24th is well; one complained of feverish symptoms:—11 on the list. A M we failed on a cruise.

27. No alteration of the list. One complained of wound who does duty. Indifferent weather.

28. The patient added the 26th, recovered; and the dysenteric patient returned to duty the 26th, relapsed; one complained of an old strain, and one of scald:—13 in the list.

29. One complained of old eruptions, who does duty. P M we anchored in Le Have harbour. It blew hard in the night.

30. The contused patient of the 9th, the dysenteric patient, one with scald, added the 20th, and one with a slight complaint, recovered;

vered; one (a marine) complained of fever, with dysenteric symptoms. Ten on the list, viz. two with fever; one with scurvy; one with consumption; one with ophthalmia; two with strain; one with contusion; and two with wound.

OCTOBER.

1. The two with strain, and one with contusion, recovered:—7 on the list. Our people caught fish; they also trucked for potatoes, pumpkins, and milk. We sailed AM on our cruise.

2. The patient with fever, added the 30th ult. is recovered:—6 on the list.

3. Two complained of fever; one of them was taken ill several days ago:—8 on the list.

4. The man with ophthalmia is recovered:—7 on the list.

5. No alteration of the list.

6. One of those who were added the 3d, is recovered; one added with fever:—7 on the list.

7. The other patient who was added on the 3d, is well; one complained of fever, and one of eruption:—8 on the list.

Part I.

8. Two

8. Two added with dysentery, one with fever, and one with rheumatism:—12 on the list.

9. One complained last night of fever:—13 on the list.

10. One added with fever:—14 on the list. The fever is uncommonly obstinate.

11. The two patients who complained the 7th, the one with rheumatism on the 8th, and the one added the 9th, are recovered; one complained of fever:—11 on the list.

12. Two added with fever, and one with contusion:—14 on the list. P M we anchored at Halifax; the Pembroke arrived from England.

13. Three complained of fever, one of them was a wounded patient;—the marine who was added the 6th with fever died. Soon after his decease, many livid blotches appeared on him, particularly on the parts whereon he lay during his illness. The fever patients chiefly complain of their head; they are generally seized with rigours, followed, in some cases, with vomiting and purging; and the purging, in some, continues. Others are seized with sickness at stomach only, but some

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with costiveness, which continues; all of them loathe their food, and most of them complain of universal and wandering pains:—15 on the list.

14. The contused patient of the 12th, is well:—14 on the list. The fever patients do not keep in bed in the day; they have very irregular remissions.

15. One marine added with fever:—15 on the list. It is not clear to me where we caught the infection, though, most probably, from the Lizard.—There was an armed brig at Hillsborough, St. John's, while the Lizard lay there, from which the surgeon of the Lizard thought they got their fever; we had communication with that brig.

16. One marine, and one seaman, complained of fever:—17 on the list.

17. The other lame patient added the 19th ult. the one on the 10th, one added the 12th, and one added the 13th, recovered; one seaman and one marine complained last night of fever; one marine added with piles:—16 on the list. The blood of one of the fever patients added yesterday is fizy.—The men were served fresh beef.

Part I.

18. No

18. No alteration of the list. The blood taken from a patient, *who was added the 8th*, was very little fizy, and of a very loose texture; the blood of the other patient taken ill yesterday, was less so.

19. Two complained last night of fever, one of whom was lately ill of it; and two to-day, of fever: one of them was seized with bilious vomiting:—20 on the list. I applied to have the ship smoked with vinegar and gunpowder, which was done, and that she might not be washed below during the winter. A M we sailed with two sloops under our convoy.

20. One of those who were added the 13th, and two of them added yesterday, recovered; one complained of fever, who had been ill four or five days:—18 on the list. Two of the patients had coughs, and two had fixed pains. Towards the end of the paroxysm they complained chiefly of giddiness, and of being light-headed, as they termed it. The blood of one of those added to-day had a thin buff on it; and the crassamentum, though loose in its texture, bore too great a

proportion to the serum. Anchored at Le Have.

21. The two that were added with dysentery on the 8th, had fever, and are well:—16 on the list. The happiest effects have ensued from blisters applied in the beginning of the fever, in many cases; petechiæ appeared on several patients, and are most distinctly seen when they have a sweat on them; their visible duration uncertain. The captain bought milk for some of the patients.

22. The patient who complained of fever on the 11th, recovered; three complained last night of it:—18 on the list. Petechiæ very common among the patients. I applied to have the ship smoked for an hour only, and it was done. (See October 2.) The men bought potatoes and turnips, and caught fish.

23. A boy added with fever, complains of sore throat:—19 on the list. Two of the fever patients have bad coughs; one added the 22d ult. with slow fever, is hectic: he had been a long time ailing. AM we failed; and PM we anchored again.

24. One added the 12th, one who complained the 18th, P M (see 19th), and one of those on the 21st, P M (see 22d) of fever, recovered. The first of these three was the patient with eruptions:—17 on the list.

25. The man who was added the 17th with piles, complained last night of fever. The marine added the 15th with fever, recovered:—16 on the list. One of the fever patients seized with piles. A number of pollock were caught by one of our boats crew.

26. The boy added with fever on the 23d recovered:—15 on the list. The convalescent fever patients relapse from very slight causes.

27. One of the patients added the 16th, recovered; two added with fever, one of whom was afflicted with it before. One complained of itch, a marine, and one of slight contusion; both capable of doing duty:—16 on the list.

28. Yesterday's relapsed patient recovered; one marine complained last night of fever; his principal complaint was violent pain in his stomach:—16 on the list.

29. Two patients, one a marine, complained last night, and three this morning, of

fever; the two seized last night complained much of their breasts:—21 on the list. One added the 27th was delirious, his tongue black, and his voice altered; one complained of strain, but does duty.

30. The marine added the 28th, and one of those added yesterday with fever, recovered; one complained last night of fever, who returned to duty the 20th, and one is added with contusion:—21 on the list. The patient with slight contusion of the 27th recovered; a number of the men have slight feverish ailments, who do not complain. P.M. we anchored at Coal Pits.

31. The two that complained the 28th, P.M. (see the 29th) recovered. The marine who was returned well the 25th, relapsed; one complained of fever, and the strained patient of the 29th, added:—22 on the list, viz, sixteen with fever, one consumptive patient, the boy mentioned the 22d ult. the boy with the scurvy, one with eruption, one with contusion, and one with strain, besides the itch patient. All the relapsed patients are very ill.

N O V E M B E R.

1. Two marines, one added the 16th, and one the 17th, and one added the 27th ult. with fever, recovered; a boy complained of fever: 20 on the list. I applied, and had the ship well smoked twice, A M with vinegar and gunpowder, and P M with junk and tobacco fires, and with hot loggerheads quenched in tar. The ship was covered every where with a white powder, by the smoking of gunpowder, and smelt very strong of sulphur, as it did of tobacco by the second smoking. Two of our boats were sent up to Fort Cumberland.

2. The other patient added the 16th, the one on the 20th, one on the 29th ult. and the boy yesterday, fever patients, with the strained patient added on the 29th, are recovered; one complained last night of fever:—16 on the list, besides the man with itch, and some with cough. The air was very agreeable last night to the men who lay in the tiers; upon every inspiration I tasted the sulphur. The boats returned, and brought a little fresh beef on board yesterday for the captain and officers.

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3. One

3. One who complained the 31st of fever, recovered; one complained last night, who had been ill four or five days of fever; purging was the most troublesome symptom, with piles; his stools are porraceous. Several of the fever patients have loose stools; a number of them have cough:—16 on the list. AM we failed.

4. Two complained last night of fever, one had purging, and had been ill a fortnight; the other was taken ill the 30th ult. and one complained of contusion of his breast from fighting:—19 on the list.

5. The man who complained the 29th ult. and the two added yesterday, with fever, recovered:—16 on the list. The contused patient of yesterday was seized with fever. Off Annapolis,---we afterwards anchored in the Basin.

6. The patient added the 2d with fever, recovered:—15 on the list. Fires were lighted in the hatchways. AM we sent a boat up to town.

7. The patient who was added the 3d, recovered:—14 on the list, besides the itch patient. AM we failed.

Part I.

S. One

8. One complained of fever last night, who had been ailing a fortnight:—15 on the list.

9. No alteration of the sick list. I applied to have fires lighted in the hatchways.

10. Fifteen still on the list. We could not light fires in the hatchways. We anchored a little while.

11. The relapsed patient added the 30th, recovered; the man with itch complained of cough:—15 on the list. One complained of strain, but does duty.

12. The patient taken ill the 30th ult. and added on the 4th, and returned the 5th to duty, relapsed on the 9th, but did not complain until last night of fever; one added with inflammation in his leg, who had the fever lately:—17 on the list. The fever patients are all better, except one, who is very bad. I got fires lighted in the hatchways.

13. The other patient added on the 8th ult. with fever, recovered; one complained of cold from lying on the booms in the barge, and one of slight wound:—18 on the list.

14. The patient added yesterday with cold, recovered:—17 on the list, besides the patient

afflicted with itch. Cruising off the Bay of Fundy.

15. A marine complained last night of fever; both this, and the relapsed patient added the 12th, caught the infection from a marine, recovering of fever; he had been very ill, and was removed from the sick berth, back to his own, lest, as he was very timid, the groans or appearance of the patients, in the sick berth, might frighten him into a relapse. The patient who was added the 8th, and the one on the 13th with wound, recovered:—16 on the list. The strained patient who did duty, is now well. We could not get the ship smoked,

16. The patient added yesterday to the list is very ill; one who had just recovered of strain, got drunk, and complained again; another was added to the list ill of an inflammation:—18 on the list.

17. The man with piles, added the 25th with fever; one added the 22d (being sent on board of a prize), and the yesterday's strained patient, were put off the list; one complained last night of fever, who was taken ill two days before: he caught it from the sea-

Part I.

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men sent on board the prize yesterday; they were mess-mates:—16 on the list. We could not get the ship smoked.

18. The patient added the 16th with tumour, recovered; one complained last night of ear-ach, and two of fever, A M:—18 on the list.

19. A boy complained last night of fever; he knew not how long he had been ill: a boy who lay close to him was also seized with it; one was added with contusion:—21 on the list.

20. The contused patient of the 4th, the one added the 18th with ear-ach, and yesterday's contused patient, recovered. A marine complained of fever; he succeeded to a berth where two marines, who had had fever, formerly lay, one of whom died the 13th ult. One added with contusion:—20 on the list. We fell in with the Lizard; the fever continued to rage on board of that ship; one man having died this cruise, and several before.—They wash the ship, and smoke her afterwards for a little time. Eleven are on the sick list, ill of fever, and several of the officers have been seized with it.

21. The

21. The two other patients of the 18th are well; the fever patient (dismissed yesterday) relapsed again by drinking; and one added with ulcer:—20 on the list.

22. A boy complained of fever, who was added to the list, making 21.—A M we anchored at Halifax.—The sick quarters are so crowded, that, it is said, there is no room for our people:—they are indeed shamefully bad quarters.

23. The contused patient of the 20th, and the other of yesterday, are well; the itch patient, besides having cough, is seized with fever; and one is added with wound:—20 bad, besides my first mate, who had an attack of fever.—Got the ship, with the people's bedding, smoked.—The last supply of necessaries being (by means of our sickness) expended almost six weeks sooner than the allotted time, I applied for more, but the commissioner would not allow them.

24. One complained of contusion:—21 on the list. The men were served with fresh beef.—The ship and bedding smoked again.—My mate recovered,

Part I.

25. A gen,

25. A gentleman, who caught the fever from his mess-mate, was added to the list, making 22.—The fever patients are in a convalescent state; but two of them, in particular, are extremely weak.

26. My second mate was seized yesterday with fever; and a boy (who had been lying about without a hammock for two months past) complained of it:—24 on the list.—Eleven fever patients on recovery, eight of whom are marines; the consumptive patient, the one with diabetes (or the hectic patient); the boy with severe scurvy, and a marine with old eruptions from a venereal cause, in all 15, were sent to sick quarters. In a few days all the sick at quarters are to be removed to George Island, whereon a sort of hospital is to be fitted up, and to be attended by a surgeon, who had been appointed, by Admiral Shulldham, surgeon to an hospital ship.—Our ship was thoroughly cleaned, washed with hot vinegar, and afterward smoked with gunpowder, junk and tobacco, as before.—Every thing was got on deck, the sick taking all their clothes with them. After all this trouble, 60 supernumeraries were sent on board of us from
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the Rainbow; eight of whom had fever, two had contusion, one affected with scorbutic symptoms, and one with ulcer.

27. My mate is recovered. One complained of fever:—7 in the list, viz. three with fever, but not very ill, and four with complaints of lameness, besides supernumeraries. Upon my representation of the fatal consequences to be apprehended to our ship's company from the fever among the supernumeraries, the captain applied to the senior officer in port, and got an order to send back the eight fever patients to the Rainbow: five of them complained of severe pain in their side or breast, with cough.—These parts had been hurt by falls not long before, and by lying about on chests in the rainbow.—They had been sent on board of her from the Pembroke, which they had cleared alongside of the wharf, and used to go into town, get drunk, and lie in the streets, and in infected houses; but the surgeon of the Rainbow had no suspicion of the infection being on board, and was surprised to hear it.—Her men were afterwards very sickly, as I was informed.

Part I.

28. One

28. One complained of rheumatism, to which he was subject, especially in foggy weather:—8 on the list, besides the four lame supernumeraries;—scrubbed all hammacoes.—P M we weighed, and anchored off Major's Beach.

29. The patient added on the 24th is well.—One complained of cough:—8 on the list. One supernumerary was added last night with contusion; five of them are ill.

30. One complained last night of strain, and another was added with rheumatic pains, and a third with fever, who messes with the patients added the 27th, making 11 on the sick list: viz. four with fever, two with rheumatism, one with cough, three with ulcer, and one with strain: besides five supernumeraries, viz. one with scorbutic symptoms, three with contusion, and one with ulcer. Could not get the ship smoked.

DECEMBER.

1. The patients added the 26th and 27th ult. and the two rheumatic patients, recovered:—7 in the list. The two contused supernumeraries of the 26th are recovered; three of

the others remain ill.—I could not get the ship smoked.

2. The boy added on the 26th, and another with cough, on the 29th ult. are well:—5 remain on the list. One supernumerary, who complained last night of fever, is recovered; three of them bad yet; one of them with ulcer, fractured his clavicle lately, and another has an old rupture.—Squally weather with snow.

3. The boy relapsed last night; he has an inguinal rupture of a considerable standing, which he never mentioned before:—6 on the list. I got the ship smoked for a short time.

4. A boy added with abscess:—7 on the list, besides the three supernumeraries.

5. No alteration of the list. The ruptured supernumerary dismissed.

6. One complained of fever; he had lately been exposed a day and a night to rain, in assisting to get off a transport that had run aground:—8 in the list. One supernumerary complained last night of fever; three of them ill. Sailed, A M, with the Amazon, Scarborough, and 34 transports, to New-York.

Part I.

7. A ma-

7. A marine, who attended the sick before they went to quarters, complained of fever: 9 in the list, besides the supernumeraries.

8. Last night three complained of fever; two of them relapses. The boy added the 26th ult. is well:—11 in the list. The supernumerary who was added the 6th, is well; two complained last night of fever; four more are ill.—The fever patients complained much of chilliness, and are dejected; the pulse is neither very quick nor full; the tongue is whitish, and they have little thirst; three of those added last have had coughs, and one of them was at first seized with syncope.

9. A marine complained last night of fever; one added with wound, and another with old strain:—14 in the sick list. One of the supernumeraries added yesterday, is well; one complained of fever, and one of rheumatism; 5 are now ill. A gale of wind.

10. The strained patient added the 30th ult. he was rheumatic, is well. Last night one was added with fever, and another with contusion:—15 in the list. A supernumerary (an old man) who had lately had cough, complained of fever; 6 supernumeraries are

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ill. The gale continues. Lost company of the Scarborough and many of the transports.

11. One complained of fever, who had it before, and one of fracture:—17 on the list.

12. One of those added on the 8th, and another on the 18th, with fever, are well; one complained of fever, and two of contusion:—18 on the list. The rheumatic supernumerary of the 9th is well. One (from messing with the gentleman who had the fever) was seized with it last night, and another A M: 7 ill.

13. The patient of the 6th, and one of those (a marine) added the 8th, with fever, are well; one complained of fever:—17 on the sick list. The fever supernumerary of the 9th is well; 6 of them ill. P M the Beverly brig, one of the convoy, made a signal of distress; being extremely leaky, the people were taken out of her, and sent on board of different ships; an officer, with sixteen soldiers, three women, and their children, were brought on board of us.

14. A marine complained last night of fever; and one added A M with contusion:

Part I.

—19 on the sick list. One of the supernumeraries added the 8th, and one the 12th with fever, are well; four remain sick. A gale of wind.

15. One of the contused patients of the 12th, and one of the 13th, are well; the marine returned well the 13th, complained of rheumatism:—18 in the sick list. A gale of wind.

16. One of the patients with old ulcer, one added the 8th, with fever, another of the 10th, with contusion, and the contused patient of the 14th, are well; one complained of fever:—15 on the list. Two supernumeraries added last night with fever, and another, A M, with ulcer: 7 of them are ill. One of the soldiers complained of scrophula. A gale of wind.

17. The boy added the 4th, and the marine the 7th, are well; one complained last night of fever, and one A M of strain:—15 in the sick list. The supernumeraries added yesterday, are well; two more added with contusion.

18. Two complained last night, and one A M of fever:—18 in the sick list. One super-

numerary returned well the 14th, complained of cough; 8 of them are ill, besides the foldier. The Amazon parted company with us, taking one ship, that had money on board, under her convoy. A gale of wind.

19. The patient added the 12th, and one of the 17th, with fever, are well; one complained of rheumatism, to which he is subject, and another of contusion:—18 ill. No other alteration. Very bad weather.

20. The fever patient of the 14th, and one with strain of the 17th, are well; a marine, who some time before had been ill of fever, relapsed:—17 on the list. The most harassing symptom among the fever patients at present, is cough. The supernumerary added the 16th with ulcer, is recovered; 7 of them ill, besides the foldier.

21. The patient of the 15th recovered; one who had been put in an infected berth, was seized with fever:—17 on the list; but no other alteration. By inquiry, I can very easily find by what means the patients contract infection. We have had very bad weather, incessant lightning, and a heavy sea. The deck where the people lie is very wet, and

the air hot and disagreeable, from the hatches being battened down; numbers of the sick are wet in their hammocks, from water running down upon them; and being so crowded with people, the sick berth is not only small, but in a bad place.

22. The rheumatic patient of the 19th is well; one complained of strain:—17 in the list. One supernumerary added with fever; 8 are ill, besides the soldier.

23. Two complained last night of fever: 19 on the list. I applied to have the ship smoked; but the decks were washed, and fires made afterwards between decks.

24. The patient added the 22d is recovered; a marine complained last night of fever, and another of habitual rheumatism:—20 in the sick list. One of the supernumeraries added with rheumatism; 9, besides the soldier, ill. Fires were lighted in the hatchways.

25. One added with habitual rheumatism:—21 on the list. The supernumerary, added the 22d, is well; one complained of cough and rheumatism, and one rheumatic patient was seized with fever; 9 are ill, besides the soldier. Fires were lighted in the hatchways.

26. The marine added the 23d is well; one added with abscess:—21 on the list. The ruptured supernumerary complained; 10 ill. —One foldier complained of abscess, and habitual flux; 2 ill. PM the other man, added on the 23d, died delirious of fever; he was remarkably dejected from his being first seized, and continued so. Very bad weather.

27. A marine, added the 28th, with fever, and the patient of the 25th, recovered; six complained of fever last night:—24 in the list, 14 of which are fever patients. Two of the rheumatic supernumeraries have fever. The sick berth smelt offensively, before it was smoked to-day.

28. The patient added the 21st is well; two (one of them a marine) complained last night of fever:—25 on the list, besides the supernumeraries. Fires were lighted in the hatches, and the sick berth smoked and cleaned.

29. One of the contused patients of the 12th, and the patient of the 26th, are recovered; one complained last night of fever:—24 in it. The supernumerary of the 18th recovered, and one complained of belly-ach; 10

Part I.

ill,

ill, besides the soldiers. The sick berth was again cleaned and smoked.

30. The marine added the 24th, and two of the patients added the 27th, recovered; one complained of fever, another of rheumatism, and a third of inflammation:—24 in all. The supernumerary added yesterday recovered, but PM he was seized with fever. No other alteration. The sick berth was again cleaned and smoked.

31. One patient added the 18th, one the 27th, one the 29th, and another yesterday, with fever, are recovered; a marine who lay between two fever patients, complained last night, and two this morning of fever:—23 in the list, viz. fourteen with fever, chiefly in a convalescent state, two with rheumatism, one with fracture, one with strain, one with contusion, one with inflammation, one with wound, and two with foul ulcer. The supernumerary added yesterday is well; nine remain sick, viz. five with fever, two with rheumatism (one of whom does duty), one with rupture, one with contusion, and one with ulcer. Two soldiers, one with scrophula, the other with habitual flux:—35 in all.

F 4

9 PM

9 P M we arrived at Sandy-Hook. Lighted fires in the hatchways, and cleaned the sick berth.

JANUARY, 1777.

1. Two (one, the marine with strain) who complained last night, and two this morning of fever; two added with old cough:—28 in the list. Two supernumeraries added with fever, one with old cough, one with scurvy, and another with rheumatism; 14 ill. A passenger in the cabin, who caught the infection from Capt. Dalrymple's servants, complained of fever; 45 in all, including the two foldiers. Sailed up, and anchored off New-Yorke. Lord Howe commands in chief, and is very ill. Cleaned the sick berth well.

2. Sent twelve fever patients, chiefly in a convalescent state, to the hospital at Brooklyn, Long-Island; one added the 27th, and another of the 29th, with fever, are recovered; three complained of fever, one of them is a servant of the captain's, who had been ill before, and another has contusion; 18 in the list. Three supernumeraries sent to the hospital with fever; one added with contusion,

Part I.

13 ill,

13 ill, besides the passenger and foldiers. Fires in the hatchways.

3. Sent four with fever, the patient with punctured wound, whose hand was inflamed, and another with bad ulcer, to the hospital:—12 on the sick list. Three supernumeraries with fever, and the scorbutic patient, were sent to the hospital; 9 ill besides the passenger. The foldiers and women were landed; the ship well cleaned, washed with vinegar, and afterwards dried with fires.

4. Sent one of those added the 2d with fever, to the hospital; a patient of the 31st ult. and another of the 1st, with fever, are well, as also the rheumatic patient of the 24th ult.—8 in the sick list. Fires were lighted. Frost.

5. My second mate was again seized with fever last night:—9 on the list. Two supernumeraries complained, one of scald, the other of inflammation; 11 bad. Spruce beer served to the ship's company.

6. One added with inflammation:—10 on the list. Three supernumeraries added with fever; 14 bad.

7. One

7. One added with rheumatism, 11 on the list. The supernumerary added the 5th, with inflammation, recovered; 13 ill.

8. The patient of the 30th ult. with inflammation, recovered:—10 on the list. The passenger is well; but no other alteration.—I am informed that the physician of the hospital thinks there is nothing the matter with our fever patients. It is true most of them sent the first day were in a convalescent state.

9. The patient with fracture, added the 11th ult. one of those with cough on the 1st, and my mate, are recovered. Sent the boy with rupture to the hospital:—6 in the list.

10. The other man, added the 1st inst. with cough, and one the 6th, are well; a marine, who had fever twice before, was seized last night with it, and one this morning:—6 in the list. Sent six of the supernumeraries to the hospital; two with rheumatism, one with cough, one with fever and rupture, one with ulcer, and one with contusion. Two supernumeraries complained of fever; 9 of them are now ill. Two of them have scurvy, though one of them does duty.

Part I.

The

The thermometer being placed on deck, stood at 25.

11. One of yesterday's patients recovered; one complained of fore throat, and one of contusion:—7 ill. Two of the supernumeraries added the 6th, do duty; one is added with scorbutic lumbago; eight of them ill, one of whom has scurvy. Sent the marine, who was added yesterday, to the hospital.

12. Two complained of nephritic symptoms: eight on the list, besides the supernumeraries.—Many of the men get drunk every day with New-England rum.

13. Yesterday's patients recovered; three seized with fever; swelling about the glands of the face and throat, but they complain chiefly of their heads, and deafness; three added with cough, and one with dysenteric symptoms:—13 on the list. One of the contused supernumeraries, added the 17th ult. and has since been seized with rheumatism, is recovered; one complained of fever, one of cough, and one is relapsed to scurvy; ten of them are ill.

14. One of the patients added yesterday, died of his fever at 3 AM: how long he had been

been ill before he complained, I know not; the other two were sent to the hospital; one complained of contusion:—11 in the sick list. One of the supernumeraries added the 6th, one the 10th with fever, one the 11th, and yesterday's fever patient, are recovered; six of them remain ill. The Flora arrived from Halifax; three of the men we sent to sick quarters, came in her,—the boy who was so ill of the scurvy, and two others. The gentleman and two of the men, who were put on board one of our prizes, were lost by the prize being run ashore near the light-house, Halifax; the other two were saved, and came in the Flora. Some more of our men, who were on board of another prize, also came in her. Our ship was haled along-side of a wharf, and moored out of the stream of ice.

15. The contused patient of the 11th, and one added the 13th with cough, recovered; two added with fever (one of whom came in the Flora), one with contusion, and the scorbutic boy with weakness:—16 in the list; three of the supernumeraries who were ill have entered for the ship. One supernu-

Part I.

merary

merary complained of cough; four of them now ill.

16. The patient added the 2d with contusion, and the other with dysenteric symptoms, are recovered; one complained of suppression of urine, and two more of the ailing supernumeraries entered for the ship:—17 in the list. One supernumerary recovered, and one remains ill.

17. The rheumatic patient of the 30th ult. and the fever patient of the 15th, who came from the Flora, recovered; one complained of fever, and one of rheumatism, who had it lately:—17 on the list. The contused patient added the 14th, is ill of fever.—No other alteration.

18. Sent the patient added the 16th, and one yesterday with fever, to the hospital; also one scorbutic patient, formerly a supernumerary, was sent to the hospital ship; one complained of cough:—15 in the list. Sent the scorbutic supernumerary to the hospital ship; one complained of cough. Very cold.

19. Sent two patients to the hospital with severe fever; viz. a supernumerary added on
I the

the 10th, but since entered for the ship, and one with contusion; a fever patient of the 15th is recovered:—12 remain on the list. No other alteration. Smoked the ship.

20. The carpenter added with fever, and another with scorbutic symptoms:—14 on the list. One of the patients added the 13th with cough, is seized with fever. No other alteration. Smoked the ship.

21. Sent three with fever to the hospital; one of them was added the 13th with cough, another on the 18th, and one, lately entered, who complained last night. The patient of the 11th, with sore throat, and the supernumerary of the 15th with cough, are recovered. The patient sent the third to the hospital, with inflammation, was sent back last night for irregularity:—11 on the sick list. The ship was washed, against my inclination, but though fires were lighted afterwards between decks, they cannot dry the ship thoroughly. 9 P M there was an alarm of fire ashore, but it was soon extinguished. When the thermometer was at 52, there was a fire in the gun-room.

22. Three who were returned from the hospital on the 20th, are again added with fever, and two other men complained:—16 in the list. The supernumerary is recovered. The distinction between the ship's company and supernumeraries will be no longer observed. Fires were lighted in the hatchways, and some *sp. salis* evaporated between decks*. The ship's company employed in washing their clothes.

23. The scalded patient of the 5th is well; and the scorbutic patient of the 20th is sent to the hospital-ship; one complained of cough, and a drunken fellow of fever:—16 in the list. The men employed as yesterday; lighted fires.

24. Yesterday's fever patient is well; one who lately had cough, complained of fever:—16 in the list. A very dirty bad day.

25. Two complained last night of fever, one of whom had cough:—18 in the list.

26. The patient added the 23d with cough, does duty; one added with cough, and one with fever:—19 in the list.

* This was recommended by Mr. Chaloner, surgeon of the Commander in Chief's ship.

27. One

27. One rheumatic patient, who returned from the hospital, was added to the list; 20 in the whole. Last night there was a false alarm of fire on shore.

28. The one added on the 24th with fever, is recovered, but has scalded his wrist; one complained of excoriation:—21 in the list.

29. A patient who returned from the hospital on the 20th, and complained the 22d, of fever, and one of his messmates who was infected by him, and complained on the 25th, were sent to the hospital; I believe both of them have been irregular; the patient added the 26th was also sent to the hospital. One added the 15th with contusion, and yesterday's scalded patient, are recovered; one added with indigestion, one with inflammation, and one complained of chilblains:—18 in the list.

30. The carpenter, who was added the 20th, recovered; one complained of contusion, and one of head-ach, who is not on the list:—18 in it.

31. The patient added the 26th with cough, had the fever, and is discharged; one added with fever:—18 in the list; viz. four with
Part I. fever,

fever, three with rheumatism, one with scurvy, (seized with indigestion); two with inflammation; three with contusion, one with furuncle, one with excoriation, one with chilblains, one with ulcer, and one weak patient, besides one with head-ache.—The ship was haled into the stream, and 54 prisoners were sent on board of us from a prison ship.

F E B R U A R Y.

1. Three marines, (one of them with inflammation) and one seaman who attended the sick, complained last night of fever; the contused patient of the 30th is discharged, and the other patient of the 30th is recovered; one complained of fever:—21 in the list.

2. The contused patient of the 2d ult. had the fever, and is recovered; and the marine with inflammation, added yesterday with fever, is recovered, as also the one with chilblains; one of our men died at the hospital last night, he was sent there the 29th; one of his messmates, upon hearing it, complained of fever; four returned from the hospital last night, one of them added to the list, who is very weak, and not free of fever; one yesterday, with old rheumatism:—22 in the list.

G

—Sailed

—Sailed and anchored P M near Hell-gates, that is between the Continent and Long Island.

3. The patient with inflammation, of the 21st; one with inflammation, of the 29th ult. one of the marines added the 1st, and yesterday's frightened patient, recovered; one complained of relapse of fever, and another of cough, who was at the hospital:—20 in the list. Sailed through Hell-gates.

4. Two marines complained of cough; one of rheumatism, one of strain, and one of ulcer:—25 in the list. P M we anchored off Gardener's Island.

5. The frightened patient relapsed again last night; the officer of marines, and the gunner added with fever, and one with scurvy:—29 in the list. P M we anchored at Rhode Island. Sir Peter Parker commands.

6. One of those added the 22d ult. and the seaman of the 1st, with fever, are recovered, as also one added the 4th with strain; five complained last night of fever; one is the officer of marines' son, who got it by sleeping with his father; and another of them caught it from a sick messmate:—31 in the list. The patient added the 29th ult. with indigestion is very ill of scurvy; a singular case. The
spruce

spruce beer is out—served grog to the ship's company.

7. One added the 30th ult. and one of those yesterday, are recovered of fever; two complained last night of fever:—31 are on the list.

8. The other marine, added on the 1st with fever, one added the 4th with rheumatism, the frightened patient of the 5th, and two of those added the 6th, are recovered; one added with scald, and another with contusion:—28 in the list. All the prisoners, except nine of them who were English and Irish, were sent on board a cartel, and six of those are very ill of the scurvy.

9. One of the hospital patients, added the 22d ult. one the 3d with cough, one the 4th, and one on the 6th, are recovered; two complained of fever, and one of belly-ache; the six men added with scurvy. P M sent one man who was very ill of scurvy, and two of the remaining six to sick quarters:—30 in the list.

10. The patient of the 27th ult. and one added the 6th, are recovered; two added with fever, one of whom had it twice before, and relapsed last night, the other is a marine:—

30 in the list. A pretence is made, whence it originates I know not, that more of our sick cannot be accommodated at sick quarters ashore, though in fact they are not half full. Very bad weather.

11. Two added with fever last night, one of them a marine, who has had it four times; and one added this morning with fever; one with scurvy, and one with rupture:—35 in the list, five of whom, marines, got cold by lying under the half-deck while the prisoners were on board. P M I was obliged to remove my thermometer to my cabin; an exceeding stormy day. A goat, which will make four dinners, was killed for the sick.

12. The gunner added the 4th, one added the 9th, and one of yesterday, (all fever patients) and yesterday's patient with rupture, are recovered; three added with fever, one of whom is often ill, and one with rheumatism:—35 in the list.

13. One added the 13th ult. with fever, who had also an obstinate swelling on the left side of his head, one of the 9th, one of the 11th, and one of yesterday, all fever patients, recovered; one added with fever, one with nephritic symptoms, and a third with habitual rheumatism:—

Feb.]

THE SICK LIST.

85

rheumatism:—34 on the list. We failed on a cruise.

14. The one added the 10th with fever, is recovered; five added with fever, three of whom have cough:—38 in the list. The sick-berth changed from a-midships to the starboard side of the main hatchway; it is cleaned and smoked as often as the weather permits.—The starboard bay, where the prisoners were confined, though it has been well cleaned, and smoked with gunpowder, still retains a very disagreeable smell.

15. One of those added the 12th, is well; one complained of contusion and fever last night; the man who had excoriations is seized with the fever:—38 in the list. P M we anchored at Block Island.

16. The patient with nephritic symptoms, added the 13th, is well; two added with cough:—37 in the list. We failed again.

17. The patient added on the 10th of Nov. with ulcer, and one of the fever patients added the 12th, are well; two added with relapse of fever (one a marine):—37 in the list.—The captain gave a sheep to the sick,

18. The patient added the 7th, and one the 16th, recovered; one added with frost-bit toes,

and an old rheumatic patient with fever:—
37 ill. The sick-berth cleaned as often as the
weather will permit.

19. One of the marines added the 4th, one
the 5th, and another the 11th with scurvy,
and one the 17th, are recovered; six added
with fever:—39 in the list. We got
some oranges and limes out of a prize sloop
from Hispaniola, for the use of the sick.

20. The other marine added the 4th, and
one of yesterday's patients, are recovered;
three added with cough and fore throat, and
one with scald:—41 in the sick list. P M
very cold; anchored at Block Island.

21. Two of the fever patients added the
14th, one of them a marine, the other marine
added the 17th, and one of them added yester-
day, are recovered. The patient with ulcer,
who recovered the 17th, cut his leg again by
getting drunk yesterday, and has now a bad
ulcer; one complained of scorbutic symptoms,
and another of excoriation:—40 in the list.
Last night was by much the coldest we have
had during the winter; in my cabin, in the
cock-pit, the thermometer was 26. This
morning we failed.

22. The patient added the third, the scalded
patient

patient on the 18th, the marine on the 10th, one on the 2d with rheumatism, one of those on the 16th, one of the 19th, and two with cough, of the 20th, are recovered; two complained of fever:—34 in the list.

23. One added the 14th, and one of yesterday's fever patients, recovered; three (one of them a boy) complained last night of fever; one added with contusion, and one with excoriation:—37 in the list. One seized with feverish symptoms last night, recovered.

24. The other patient added the 22d, is recovered; two with fever, of whom one had several relapses, added to the list:—38 in the list, besides some with cold, who do duty.—Bad weather.

25. The patients added the 21st, and one of the fever patients on the 23d, are well: one complained of belly-ache, one of rheumatism, and two of contusion:—39 in the list, and a number ailing who do duty.

26. One with contusion, and another with excoriation, added the 23d, and one of yesterday's contused patients, are recovered; four complained of fever, and one of contusion:—41 in the sick list. The ship was cleaned. P.M. one of them added the 19th, died of

fever: he is the 4th who has died of it. We spoke with the Orpheus, and her prize. I hear they have seventy on their sick list, chiefly with fever, which they caught, it seems, from some prisoners whom they had on board. I have since been told by the surgeon, that they lost twelve or thirteen on board, and a good many at sick quarters, by this fever. He did not use the bark.

27. One of the 17th ult. with rheumatism, one added the 9th, the frequently-ailing marine of the 11th, one of the 24th, a contused patient of the 25th, and one of yesterday's fever patients are recovered; one complained of fever, whose messmate had it lately, one of furuncle, and one of scald:—38 in the list. Fires were lighted in the hatchways.

28. The patient added the 9th with the belly-ache, one of those added the 19th, and one the 26th, with contusion, are recovered; two added with fever, and one with inflamed arm:—38 in all;—viz. sixteen with fever, seven with scurvy, three with rheumatism, one with bad cough, one with belly-ache, one with ear-ache, one frost-bit, one with excoriation, one wounded, one with inflammation, and two with furuncle.

MARCH,

MARCH.

1. One of those added the 19th, one with belly-ache the 25th, and one with fever the 26th ult. are recovered; four complained of fever, (one of them a relapsed patient) and two of rheumatism, who are subject to it;—41 in the list.

2. One who had furuncle, and was seized the 1st ult. with fever, is recovered; one complained of fever:—41 in the list. One of the scorbutic patients, who was a prisoner, has severe frost-bit toes, but did not complain of them before.

3. One of the marines added the 4th, one of the fever patients the 26th, the two furuncle patients, and two fever patients added the 1st, are recovered; one complained last night of fever, one of diabetes, one of constipation, and one of ulcer:—39 in the list. We spoke with the Orpheus, whose people are still very sickly.

4. The patient added the 2d, who came from the hospital, and one with inflammation, the 28th ult. are recovered; three complained of fever, one of scorbutic symptoms, and one of the furuncle patients, who returned to duty yesterday.

yesterday, is relapsed:—42 in the list. P M anchored at Block Island.

5. One of those added the 22d of January, who had been at the hospital, and has had several relapses since; one added the second, one with diabetes the third, and one of those added yesterday with fever, recovered; one complained of fever:—39 in the list. P M the Orpheus went into Rhode Island. The inhabitants brought off a little fresh stock, potatoes, beet roots, and eggs.

6. One of the patients added the 19th ult. and one of yesterday's, are recovered; one complained of inflammation:—38 in the list. P M we stood towards Block Island to get a bullock, some fowls and potatoes. Every thing very dear.

7. One who messes with two fever patients was seized with it, and one complained of contused knee:—40 in the list. The Captain ordered fresh broth for fifteen of the worst of the sick people, who could use it; and the purser served a number of the sick with fresh beef in lieu of grog, which I had stopped.

8. One of the scorbutic patients added the 9th, one of the fever patients the 28th ult. one the 4th, and the furuncle patient are recovered:

covered; five complained of fever:—41 in the list. The Captain ordered broth for the sick.

9. One of the scorbutic patients added Jan. 18, with fever, the three rheumatic patients (one of Jan. 26, and the other two of the 1st inst.), one of those added the 5th, the other the 27th ult. with fever, one of the fever patients of the 1st, and one of the 4th, are recovered; one complained of bad cough, and one of fever who has been ill five days, and came out of the prize West India sloop:—35 in the list.

10. One of the scorbutic patients of the 9th, one added the 22d with fever, one the 27th ult. with scald, and one the 3d with contusion, recovered; one complained last night of fever, and another of scorbutic swelled ankle to which he is subject:—33 on the list.

11. The patient added the 1st, and one the 8th with fever, and one of the 9th with bad cough, are recovered; one complained of fever, one with giddiness, and one with ear-ache:—33 in the list.

12. A marine who has been frequently ill before, and was added the 24th ult. with fever, the fever patient of the 7th, and yesterday's patient with giddiness, are recovered; one complained last night of fever:—31 in the list.

list. P M the prisoner added the 9th died of his fever in a violent delirium; he had been ill of fever before on board the sloop, and was five days ill before he complained to me. This is the 5th patient who has died of fever; petechiæ are very common among the fever patients.

13. The patient added the 6th, the scorbutic one the 10th, and one with ear-ache the 11th, are recovered; a marine added with foul ulcer:—28 on the list.

14. A patient of the 14th ult. who has been scorbutic since he recovered of fever, and one added the 8th, are well; one complained last night of fever, one had return of bad cough, and another, subject to rheumatism, is added with scurvy:—19 in the list, besides two frost-bit and one ulcered, (prisoners) brought out of a prize; a quantity of onions were brought from the prize, and served out to all the ship's company. P M we anchored at Rhode Island, and sent 7 men to sick quarters, viz. one with bad cough, one old rheumatic patient, three scorbutic, one of whom was frost-bitten, a boy added the 8th with fever, and the patient with excoriations.

15. The patient added the 12th is recovered; one complained of fever, he attends the sick, and is frequently infected:—22 in the list.—The prisoners were sent on board the Chat-ham.

16. The fever patient of the 11th recovered; one added with fever who lately came from sick quarters, and had been sent there from one of the prizes, ill of fever:—22 in the list. The Greyhound and Orpheus went up the river.

17. The rheumatic patient added the 25th ult. and one the 15th, from attending the sick, recovered; two complained of fever:—22 in the list. We failed in company with the Lark, and anchored P M at Block Island.

18. One added the 19th ult. and one of yesterday's patients are recovered:—20 in the list. A M we failed, and P M we run a sloop ashore; the Lark stood in pretty near to her afterwards, and we followed, both firing a considerable time at her and at two guns, from whence the rebels fired at us, without hurting either of our ships; but one of our men, by ramming home a wad and cartridge without the gun being spunged, had both his hands blown off, his arms broke and much lacerated

lacerated, and his face greatly burnt by the cartridge taking fire. Both arms were necessarily amputated above the elbows. The fever patient of the 14th died PM: he was addicted to drinking. He is the 6th who died of fever.

19. The frost-bit patient added the 14th, and one of the fever patients of the 28th ult. recovered; one complained yesterday of headache, and another this morning of fever:—20 in the list. The sick-berth is cleaned and smoked every good day.—We anchored off Plum Island.

20. One complained of rheumatism, two of scurvy, and one of ear-ache:—24 in the list. We anchored AM at Shelter Island.

21. One complained last night of fever:—25 in the list. Employed wooding and watering the ship. No stock to be got worthy of notice.

22. The fever patient of the 7th, one of the 8th, one of the 17th, two of the 19th, one with rheumatism, and another with ear-ache, of the 20th, are recovered; two complained of fever, one of bad cough:—21 in the sick list.

23. The wounded patient died this morning

ing of his wounds, and one of the scorbutic patients of the 20th recovered; one complained last night of fever:—20 in the list.

24. One added the 14th ult. and one of the fever patients of the 22d, recovered; a black complained of fever last night, and another man this morning, and one of contusion, making 21 in the list.

25. One complained last night of fever:—22 on the list, five of them with very bad fever. The contused patient of the 25th is well.

26. Two were added with indigestion, from eating raw *clams* or *bens* unwashed*, last night; several others complained from the same cause, who were not added to the list, and were all relieved by vomits:—23 in the sick list. Twenty-nine Americans made their escape in a small boat from Connecticut, and came on board of us, to be sent to New York to enter as volunteers in one of the Royal American corps. After getting some victuals and drink, they were sent ashore to one of our foraging parties at Long Island. The Captain and the officers gave the sick two sheep.

* A species of Shell Fish.

27. The patients added yesterday are well; —one added with fever, who had it very feverely before, and one with excoriation, making 23 on the list. A M failed, and P M arrived at Rhode Island.

28. One added the 26th ult. one of the 21st, another of the 22d, and two of the 24th, were sent to sick quarters with violent fever: —18 in the list.

29. The patient of the 27th with fever, is well: —17 in the list.

30. One complained of frost-bit toes: —18 in the list. Sailed about six or seven miles up the harbour between Rhode Island and Prudence, to relieve the Centurion.

31. The patient added the 16th is recovered; one complained of a scorbutic swelled leg, making 18 on the list. P M a sick supernumerary was sent with the rest of them on board the Centurion. The 17 sick are, six with fever, four with scurvy, one with bad cough, one with frost-bit toes, one with scald, one with excoriation, and three with ulcer. Our boat rows guard in the night.

A P R I L.

1. The patient with cough, and another with

with excoriation, are recovered; yesterday's recovered patient is relapsed, and two others added with fever relapses:—18 in the list.

2. The fever patient of the 23d, and one with frost-bit toes of the 30th ult. are recovered:—16 in the list. We began to dig a garden yesterday on the island of Prudence, and to sow some feeds. No inhabitants on it.

3. The patient added the 8th of February with contusion, and seized the 11th ult. with fever, and one of those added the 1st, are recovered; a marine complained of relapse of fever last night:—15 in the list. One of our men sent from a prize to sick quarters with fever. The Centurion sailed down to Newport.

4. One of the ulcer patients, who was added the 21st ult. with wound, another of the 1st, and yesterday's patient, are recovered; one added to the list with fever:—13 in all.

5. The man added the 20th of Feb. with scald, is recovered:—12 in the list.

6. Two (one of them a marine) complained of fever, both of whom had it before:—14 in the list. The convalescents were sent ashore to walk, and the ship was washed.

H

7. No

7. No alteration of the sick list. I wanted to have a tent erected on shore for the sick, but the captain would not consent to it. He allows the convalescents to go ashore to walk when the weather permits. Their mutton is all expended. They have portable soup with onions.

8. One of the patients added the 6th is recovered; three added with fever, and one with inflammation:—17 in the sick list.

9. One of the scorbutic patients of the 20th, another of the 25th ult. and one of yesterday's fever patients, are recovered; one added with inflammation, from cutting his nail too close:—15 in the list.

10. Two complained of fever, one of bad cough, and one with lethargic symptoms:—19 in the list.—A very wet fog.

11. The marine added the 13th ult. and the relapsed patient of the first (formerly a supernumerary), are recovered; one who lately had the fever, is relapsed, and another with sore throat added, making 19 in the list. Some portable soup sent on board for the ship's company. I advised 4lb. of it to be dissolved every banian-day in the pease-soup.

12. The fever patients of the 8th, another
Part I. fever,

fever, and the lethargic patient of the 10th, and yesterday's fever patient, are recovered:—15 in the list. The patient added the 10th with cough, is seized with fever. The people like their pease with the soup.

13. One patient of the 6th, a fever patient of the 8th, and two others of the 10th, recovered:—12 in the list.

14. One complained last night of fever, one of head-ache, and one of inflammation:—15 in the list. One of the scorbutic patients seized with fever.

15. The patient of the 11th, with sore throat, is well; one complained last night of fever:—15 in the list. I hear the men on board of other ships will not eat their pease with the soup. I suppose too much of it is boiled in them.

16. The patient added the 10th ult. and one of the 14th, with head-ache, are recovered; one complained of relapse of fever, and another of scorbutic symptoms:—15 on the list.

17. One added the 2d, and one the 31st, ult. and yesterday's fever patient, are recovered; one complained of fever and inflammation:—13 in the sick list.

18. A boy complained of fever last night, one of fore throat, and one of flight wound:—16 in the list.

19. No alteration of the list. The patient of the 15th is very ill.

20. The one added the 10th with bad cough, and one of the 18th with flight wound, recovered:—14 on the list.

21. No alteration.

22. The patient added on the 9th is well:—13 on the list.

23. One complained of scorbutic symptoms last night:—14 in the list.

24. Two added with fever:—16 in the list. One of the patients added this day, has been ailing since he came from New-York hospital. P M the patient added the 15th died of fever. This is the 7th who has died of fever.

25. One of the 17th is well; one complained of scorbutic symptoms:—15 in the list.

26. One complained of contused wound, and another of inflamed finger:—17 in the list.

27. The fever patient of the 4th, and one
Part I. the

May.]

THE SICK LIST.

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the 23d, are recovered; two added with fever:—17 in the list.

28. No alteration.

29. Seventeen in the list. I am informed that two more of our people were sent with fever, from the prize to sick quarters.

30. Two fever patients sent to sick quarters. The patient added the 25th, is well; one of the scorbutic men (a Black, an irregular fellow) returned from sick quarters as bad as when he went, and is added to the list:—15 in it, viz. five with fever, four with scurvy, one with sore throat, three with inflammation from different causes, one with contused wound, and one with ulcer.

M A Y.

1. The boy with scurvy, added the 2d of August ult. and was since in sick quarters at Halifax, the boy with ulcer of the 3d, one with fever on the 8th of March, one with inflammation on the 8th, and one the 27th ult. are recovered; two complained of fever, one of whom had it lately, and one of rheumatism:—13 in the list. Last night the gentleman

H 3

who

who had charge of the prize went to sick quarters, and died this day of his fever*.

2. No alteration.

3. Thirteen still in the list.

4. Two (one a marine) added to the list with fever:—15 in it.

5. One of those added the 6th, and another the 24th ult. are well; one complained of abscess:—14 in the list.

6. One added the 16th with scorbutic symptoms, and one the 18th ult. with sore throat, are recovered:—12 in the list.

7. One added the 1st, with fever, is well; one added with fever and inflammation:—12 in the list.

8. No alteration.

9. The patient of the 5th is recovered:—11 in the list.

10. The boy added the 8th ult. though pretty well recovered, has relapsed, and is sent to sick quarters; one is added with relapse of fever:—11 in the list.

11. One complained of fever:—12 in the list.

* I never saw him during his illness, nor did my mates.

12. Two

May.]

THE SICK LIST.

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12. Two added with fever, one of whom has had several relapses:—14 in the list.

13. The patient added the 11th, the two yesterday, and the Black with scurvy, were sent to sick quarters:—10 in the list.

14. The other fever patient of the 1st is well; one complained of contusion:—10 in the list.

15. A man who lay close to the sick berth, complained of fever, and was added:—11 in the list.

16. The other patient of the 27th ult. and one of the 14th, are recovered:—9 on the list.

17. The patient added the 10th is well:—8 in the list. The ship is moved more than a mile farther up.

18. The rheumatic patient of the 1st is recovered; another added with fever:—8 in the list.

19. No alteration in the list.—I applied to the captain to cause oxylapathum, dandelion, tops of wild pease, &c. to be gathered, and boiled every banian-day among the ship's company's pease.

20. One complained of fever:—9 in the list. Plenty of mint, mustard, sorrel, and

H 4

lamb's

lamb's quarters (as it is vulgarly called), to be gathered ashore, which are well cleaned, and boiled with the pease.

21. One complained of belly-ache, and one of tooth-ache:—11 in the list.

22. One complained of a very bad ulcer in his leg:—12 in the list. The men are very fond of their pease with the soup and vegetables among them.

23. The marine fever patient of the 4th, sent to sick quarters, and one of the 21st, are recovered:—9 in the list. These two days past the NW wind has burnt and withered every thing ashore amazingly. A hot day.

24. The patient of the 26th ult. of inflammation, is recovered:—8 in the list. Some four croute sent on board for the ship's company; half a pound of which is to be served to each man, to eat with their salt beef on Tuesdays and Saturdays while it lasts.

25. One complained of inflamed foot:—9 in the list.

26. Four with fever (two of whom, one a boy, had it before) added to the list:—13 in it.—They have all different symptoms who were added to-day.

Part I.

27. One

+ H

June.]

THE SICK LIST.

105

27. One of the 15th recovered; another had a relapse of fever;—13 on the list.

28. The patient of the 20th, one of the 25th, another of the 26th, and one added yesterday, are recovered; one complained of sore throat who had it lately, and of furuncles:—10 in the list. The northerly winds have done much mischief to the fruit-trees, &c. on shore.

29. No alteration of the list. At noon, being relieved by the Diamond, we dropped down the harbour, and anchored.

30. The patient added the 14th ult. with inflammation, and one of the 18th, are recovered:—8 on the list.

31. One of those added the 26th is well:—7 on the list, viz. three with fever, one with wound, and two with ulcer.——Anchored at New-Port. Some porter sent on board for the sick, from the agent victualler. Eight of our men brought on board from sick quarters.

JUNE.

1. The patient with wound, added the 26th of April, one added the 4th, and another the 26th ult. recovered; the patient with sore throat,

throat, discharged; one complained of whit-loe:—4 in the list.

2. Two of the eight who came from the hospital the 31st ult. are added to the sick list with scorbutic symptoms:—6 in it. Those who have had fever of late, have been seized with scorbutic symptoms, in their convalescent state. P M we sailed in company with the Amazon and Orpheus on a cruize, and the three ships' companies agreed *viva voce* to share prize-money.

3. One complained last night of fever:—7 in the list. A very wet fog.

4. The patient added the 26th ult. is recovered; two added last night with fever:—8 in the list.

5. The patient added the 7th, another of the 22d ult. and one the 1st, are recovered:—5 in the list.

6. The patient of the 4th is recovered; two, one of whom came from a prize, complained last night of fever:—6 in the list.

7. One of the patients added the 2d, and one of the 4th, are recovered; one complained last night of hæmorrhage from the nose:—5 in the list.

8. The patient of the third, and one of the
Part I. 5th

5th recovered; one added with fever last night, who came from sick quarters the 30th ult.—4 in the list.

9. One added last night with contusion:—5 in the list. Caught a few fish.

10. The patient added the 8th, recovered; one complained of fever—5 in the list.—Caught some fish. Very wet fogs.

11. The hæmorrhage patient of the 7th is recovered:—4 in the sick list. We caught a few fish.

12. The patient of the 9th is well; one with wound, one with contusion last night, and one with scorbutic blotches, who was formerly very ill of scurvy, and sent to sick quarters, added to the list:—6 in it.

13. One added with wound, and a boy with relapse of fever:—8 in the list. Very wet fogs.

14. One complained of strain:—9 in the list.

15. Last night a patient was seized with epilepsy, who is subject to it; another was added with fever:—11 in the list. We caught a few cod.

16. The other patient of the 6th, one of the 10th, the wounded patient of the 13th, and

and yesterday's fever patient, recovered; a boy, who came from sick quarters the 13th ult. relapsed with fever; one complained of indigestion, from eating fish, and two with slight wounds:—11 in the list.

17. Yesterday's patient, with indigestion, is recovered:—10 in the list.

18. The wounded patient of the 12th, and the two of the 16th, recovered so far as to do duty:—7 in the list.

19. No alteration in the sick list.

20. No alteration.

21. The contused patient of the 12th, and the boy of the 16th, are recovered:—5 remaining on the list.

22. No alteration.

23. The epileptic patient has had fever, and recovered:—4 in the list.

24. No alteration of the list. P M a squall of wind blew remarkably hot off the land.

25. Four in the list. We caught a number of mackerel.

26. The other patient added the 2d, and the patient of the 14th, recovered; a marine seized yesterday with fever:—3 in the list.

27. The marine is recovered; one complained of ulcer:—3 in the list. The last of
Part I. the

the people's portable soup is made use of. P M we anchored in Cape Cod Bay.

28. No alteration of the list. We moved and anchored in Cape Cod Harbour. Our water-casks were sent ashore to be filled, and a corporal with six marines from each ship, and a marine officer to command them in the night, were sent to guard the casks.

29. The scorbutic patient of the 12th is recovered:—2 in the list.—Some fishermen live about this place, from whom we get a few fish for the ship's company.

30. No alteration of the list. The two sick are, the boy who was added the 13th, with fever, and another on the 27th with ulcer.

S E C T. III.

MONTHLY REVIEW OF THE SICK LIST,
From Sept. 1, 1776, till June 30, 1777.

S E P T E M B E R.

THE sick list varied little, but often, until the middle of the month, when it decreased: it afterwards increased, though slowly, until

until the 24th, then varied a little, and decreased the last day.

The patients who complained were, four with fever, two with head-ache, sixteen with dysentery, one with belly-ache, one with ophthalmia, one with hæmorrhoides, one with eruption, one with scald-head, three with strain, two with contusion, three with wound, one with swelling of the knee, and one with furuncle.—In all 37.

OCTOBER.

The fever patient who was taken ill the 22d ult. (a puny boy who had been returned to duty the 19th only) after having been in the list above three weeks, complained much of his head at first, and in two days after, of flux, which continued on him with head-ache a week, and weakened him so much, that it was a fortnight before he recovered. When he complained on the 22d, it was of bad cough, head-ache, and pain of his side; after this fever, which held him for eight or ten days, he was seized with diarrhoea and diabetes from weakness, of which he did not recover in many weeks.

The fever made its appearance on the 15th of September, the third day after we arrived at

Part I.

Halifax;

Halifax; a young man, who belonged to a boat at that time, and therefore was probably on board the Lizard and ashore at Halifax, was taken with *an ague*, he said; but fortunately he soon got well: and even before him there were two had slight attacks of it. Some dysenteric patients intervened between this man's being taken ill, and the recovery of the boy before-mentioned on the 19th, and his falling ill again on the 22d. I was surprised to find him so long in recovering, as I gave him the bark not sparingly. There was another man seized with it on the 22d, who recovered perfectly well the 26th.

The ship's barber was the next person seized with it on the 3d; his attack was not violent, and being a tippling young lad, he went about the ship five or six days before he complained, lest his grog should have been stopped. He soon recovered.

Another young man, of a delicate constitution, complained of the fever the same day the barber did. He was very often ailing, but he luckily got quite well in a few days.

The next person seized with fever was a marine, who died the 8th day of his illness. He was much given to drinking, and had frequently

quently got drunk with small beer; was much bloated, of an indolent disposition; and not long before had a fit of drinking. I was much alarmed at seeing, on several parts of his body, a few hours after he died, large black blotches, particularly in those parts he had lain upon. None of the symptoms were violent; therefore, as he was naturally of a very slothful disposition, I did not apprehend he was in danger. His case will be related hereafter. On this occasion, I was the more uneasy, because the symptoms about the other fever patients were more obstinate than those which had appeared in former months. These circumstances soon left me no room to doubt but that we had caught a virulent infection. I cannot determine whether we caught it on board of the Lizard, or at St. John's, or at Halifax, for the fever existed in, and we had communication at, all the three places within a few days. One thing is certain, that wherever it was contracted, the debauch which our people committed on the 15th of September, soon roused it into violent action. From a very healthy state, we were suddenly plunged into a very sickly and dangerous one.

Thirty-nine complained of fever, two of
Part I. dysentery,

dysentery, one of rheumatism, two of hæmorrhoides, one of eruption, one of itch, one of strain, and three of contusion.—Fifty in all.

The method in which the fever was treated will be related in its proper place. None of the other complaints required any particular treatment. Besides, it is my intention to confine my observation to fever.

N O V E M B E R.

A good deal of pains was taken to clean and smoke the ship in different ways, the first of this month, with larger fires of junk and tobacco, than were generally made use of afterwards. To this precaution alone can be attributed the visible check which was given to the fever: there being a decrease of no less than fifteen patients in the course of the month; and all who were in the list did well. The fact is so clear and incontestable, that nothing further need be said in favour of smoking with large fires for three or four hours at a time, but more especially with tobacco, when a ship becomes sickly; nor of frequently repeating this process, at least as often as circumstances will admit.—The sick themselves

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not

not only found the air more cool and refreshing after smoking, but those in health, who lay in the tiers and more confined places of the ship, said it was like a change of climate to them, so cool and agreeable the air was rendered. But it is likewise to be remembered, that the sick were treated with bark.

On the 26th, the sick, or rather convalescents, were sent on shore at Halifax, with all their clothes, solely with an intention to get the ship cleared of the infection. Indeed, no other motive could have justified sending people to such quarters. Of all the nests of filth combined with poverty, which I ever beheld, they were by far the most shameful. Where, or on whom this reproach falls, I know not; but what rendered it inexcusable, is, that Halifax had never been molested by the rebels, and consequently there were no concurring circumstances to make it necessary to coop up the sick and wounded seamen, in the most filthy and decayed house about town, with scarce a square of glass in a window. As to their victualling, they were left to the mercy of an old woman and her daughter,

Part I.

who

who farmed that part of the *dirty* business, I must call it *.

As soon as they were sent on shore, the ship was cleaned and smoked with as much care as before, and we flattered ourselves that, by repetitions of this process, we should be able to subdue the infection entirely; but, to our great mortification, sixty supernumeraries were sent on board in the evening from the Rainbow, eight of whom had ship fever; and there was no time to get an order to send them back that night.

Besides eight supernumeraries ill of fever, who were sent back to the Rainbow next day, 24 were added to the list this month with fever, one with scurvy, two with rheumatism, three with cough, one with ear-ache, one with hæmorrhoides, three with strain, six with contusion, two with wound, two with inflammation, and two with ulcer:—in all 47.

I have nothing to observe at present with respect to the manner in which those men were treated.

* I will do the commander in chief the justice to say that I believe this was wholly unknown to him, or to his surgeon, who inspected the hospitals where the fleet lay.

D E C E M B E R.

Only five were added with fever the first week; one or more were added every day in the second week; and in the remaining part, excepting the 15th, 19th, and 26th, one or more complained of it daily. But if the state of the weather, and the ship's being so much crowded on the passage from Halifax to New-York, be considered, it will not be thought surprising that we had one patient died, and such an increase of the sick list at the end of the month. On the last of November there were only 16 in it, including supernumeraries; and on the last of this month there were 35 in it; but the fever patients were then chiefly in a convalescent state, though they were liable to relapse from inattention, or the least irregularity. There were 49 fever patients, one with dysentery, one with belly-ache, nine with rheumatism, one with scrophula, one with cough, one frost-bitten, two with rupture, six with contusion, two with fracture, two with wound, two with inflammation, three with abscess, and one of ulcer, complained:—in all 83.

The symptoms of the fever were vehement this month, and were very obstinate, particularly delirium. It was incident to those who complained of rheumatism, and they, when ill of it, stood more in need of cordials than of evacuations. The rest of the patients were treated after the usual manner.

The passage to New-York was extremely disagreeable from the length of time we were on it, the badness of the weather, the great number on board, and our being so sickly. The sick being unavoidably so ill accommodated in their berths, rendered it still worse. We had sometimes three different gales of wind in the four-and-twenty hours.

JANUARY, 1777.

For the first nine days, excepting the 1st, 2d, and 5th, no fever patients complained. It may be observed, that the more sick we had on board, the more patients we had daily complaining.—*Query*, if this might not proceed from the following causes:—Might not so many people as we had on board on the passage, crowded into so small a space, contribute to this?—When in such a situation there are a number of sick in a ship, will not the

infection daily acquire more virulence?—And, under these circumstances, will not those who are obliged to pass and repass often in the course of twenty-four hours, by the sick berth, be very apt to be affected by the sight of the sick, as well as by the infection?—That the wet decks, and the people lying in wet hammocks (from the upper works of the ship being leaky), contributed thereto, no person will doubt.

Through the remaining part of the month, the men were taken ill nearly every other day; but, in order to get rid of the infection, they were sent to the hospital soon after they complained, and a great deal of pains taken to keep the ship clean. Our people were very irregular this month. The ship being very near a wharf, and they having received a little prize money, it was all laid out for New-England new rum.—Whether the patient who died of fever the 14th, in so short a time as thirty-nine hours after complaining, had drank any of that abominable new spirit, I know not for certain, though I suspect he had. His case will be related in its proper place.

The patients that were added to the sick
Part I, list,

list, were, forty with fever, one with headache, one with dysenteric symptoms, one with indigestion, seven with scurvy, five with rheumatism, two with sore throat, nine with cough, three with nephritic symptoms, one frost-bit, one with scald, six with contusion, one with inflammation, one with abscess, one with furuncle, and one with excoriation : —in all 81.

F E B R U A R Y.

This was the most sickly month we had in America ; a greater number of fever patients being added to the list in the course of it, than in any other. Yet only one patient (a supernumerary who came from the Rainbow) died. Although the prisoners were on board of us only nine days, it cannot be doubted but that, by their crowding the ship, they promoted or increased the sickness. One of them died on board, without my being informed of his illness, until a few hours before he died. By the accounts I had of his case, he was in some measure starved from want of clothes and bedding. But as the prison ship from whence they came was sickly, as I was informed, it is more than probable that he was

infected before he left her; and on board of the Juno they were necessarily crowded together into the starboard bay, where he had a wet deck only to lie upon. That part of the ship was unavoidably wet by the cables; and the bay had an offensive smell for a considerable time after they were sent away, though well cleaned and smoked. While these poor creatures were on board, our marines lay under the half-deck, where they caught cold, and were seized with fever.

The winds being generally northerly, the weather was very cold with snow. Every day, excepting the 4th, 8th, 16th, 20th, 21st, and 25th, fever patients were added to the list, to the number of 61, besides one with head-ache, two with belly-ache, nine with scurvy, five with rheumatism, three with sore throat, five with cough, one with nephritis, one frost-bit, three with scald, one with strain, two with rupture, six with contusion, one with inflammation, one with furuncle, two with excoriation, and two with ulcer:—106 in all.

An urgent cough, with severe head-ache, were the most frequent and troublesome symp-

Part I.

toms

toms of the fever this month. No fever patients were sent to sick quarters, but one from a prize without my knowledge.

M A R C H.

The number of sick were greatly diminished this month, but still the majority of those who complained were fever patients, viz. 34; besides two of indigestion, six of scurvy, three of rheumatism; three of cough, two of ear-ache, one of giddiness, one of diabetes, four frost-bit, three of contusion, one of wound, two of inflammation, one of furuncle, one of excoriation, and three of ulcer:—in all 67. One of the fever patients died on the 12th, and another on the 18th; the former was the prisoner from the sloop, who had been so long ill before he complained. Irregular people suffered far more than others in the fever,—their symptoms being more severe, and their relapses more frequent. But I observed exceptions to this rule; for under the disadvantages of irregularity, the utmost degree of filthiness and nakedness, and of having a chest only to lie upon, without bedding, I have seen the sick recover: and what is rather extraordinary, the young, raw, dirty
lads

lads from Scotland, who had been but a short time at sea, were seldom seized with it. The man who was blown up or wounded on the 18th, died on the 23d. It was some time (perhaps a quarter of an hour) after the accident, before he recovered any motion or sense, or felt any considerable pain, and he continued delirious throughout the first night.

Three fever patients were sent to sick quarters on the 28th. For the first five days, fever patients were daily added; but on the 6th, 7th, 13th, 18th, 20th, and 26th, no fever patients complained, nor through the remainder of the month, excepting the 27th; so that by far the greatest number were added before the 18th, after which the infection began to decrease very obviously. This could proceed from nothing else but our firing so much on the 18th,* which not only smoked the ship thoroughly, but also the men and their clothes, which never could be done in the usual way of smoking. The fact is clear, whatever conjectures may be formed on it, as appears by the daily state of the sick list ever after. Yet nothing but accidental cir-

* See pages 75 and 76.

cumstances can procure to a sickly ship's company such a beneficial smoking; as the expences attending the consumption of so much powder as we fired that day, will never be allowed. It may therefore be said, with seeming propriety, that little advantage can be derived from this being known, unless it could be put in practice. I think, however, that this being inculcated on board of a sickly ship, when coming to action, may be an additional inducement to them to perform their duty with becoming spirit.

A P R I L.

Northerly winds were the most prevalent this month, consequently the weather was rather cold and unpleasant, though we had but little rain. It was of some benefit to the convalescents that they were allowed to walk on shore now and then; but a good sick tent erected on shore, would have been of much more benefit, not only to all the sick, but to the ship's company in general; as we might thereby, probably, have been able to have entirely *smoked* out the infection.

The sick continued to decrease in number on the list, and the greatest number of the fever

fever patients were added to it before the 19th, viz. on the 1st, 3d, 4th, 6th, 8th, 10th, 11th, 14th, 15th, 16th, 17th, 18th, 24th, and 27th. On the 24th, one died, who, I believe, came from the Rainbow. Two men* were sent to sick quarters with fever from a prize, and two from the ship on the 30th. All the patients of this month were, 27 with fever, one of phlethora, one of dysentery, four of scurvy, two of sore throat, one of cough, two of wound, and six of inflammation:—in all 44.

The most obstinate symptoms of the fever this month, were head-ache, universal pains, and cough. The delirium was very urgent in that case which proved fatal.

M A Y.

We now became daily more and more healthy. Only 28 patients complained the whole month: viz. 19 of fever, one of belly-ache, two of rheumatism, one of sore throat, one of contusion, one of inflammation, one of abscess, one of furuncle, and one of ulcer.

* Neither those men, nor any sent from prizes, were under my care. They are only mentioned as men belonging to the ship, who had fever.

Part I.

The

The weather, though somewhat backward, was upon the whole temperate. The winds were mostly between S E and N E. The N W on the 22d and 23d did much mischief, as has been already observed, and likewise on the 28th.

The symptoms of the fever were now much milder; the head-ache, with pains in the limbs, as the patients expressed themselves, were most troublesome.

The gentleman went the 30th ult. from the prize to sick quarters, where he died the 1st inst. He had of late, I was informed, lived very irregularly, and was subject to complaints of his breast from a hurt which he formerly received. Five were sent this month with fever to sick quarters.

Our people, particularly those who were scorbutic, received benefit from walking on shore; as well as from the portable soup and greens being boiled among their pease, and from the crout.

J U N E.

We had very little bad weather at sea this month, it being chiefly mild, but the atmosphere was either foggy, or in general very
4 hazy.

hazy. The ship's company caught a great many fish, and they had their soup as usual while it lasted, with crout, twice a week. Under these circumstances the sick list continued to decrease as to fever, to the great satisfaction of every person on board. Only twelve complained of fever, one of indigestion, three of scurvy, one of hæmorrhage, one of epilepsy, one of strain, two of contusion, four of wound, one of abscess, and one of ulcer—2:7 in all.

The head-ache was the most troublesome symptom among the fever patients.

C H A P. III.

MONTHLY REVIEW OF THE SICK LIST,

From July 1, 1777, till July 30, 1778, with meteorological Observations, and remarkable Occurrences.

J U L Y.

TH E winds were variable, blowing moderately from every point of the compass in the course of the month. It was very seldom calm; 5th, 9th, 17th, and 20th, light showers; and 22d, 23d, and 29th, showers; the atmosphere was generally hazy, foggy, or cloudy. On the 2d, 3d, and 4th, heavy dews: The rain fell on the 5th and 17th, with $1\frac{1}{2}$; 22d with 1 ; and 29th with 1 . Mean height of the thermometer about 65; new moon 4th, full moon 20th.

The sick list increased from three to nine in the course of the month; there were added to it in all seven with fever, the symptoms of which were become milder; one with head-ache, one with dysenteric symptoms,
two

two with belly-ache, one with vomiting, three with indigestion, six with scurvy, two with rheumatism, one with hypochondria, one with worms (ascarides), one with eruption, two with strain, one with hydrocele, one with contusion, three with inflammation, and one with ulcer:—in all 34.

On the 26th a cask of molasses was taken out of a prize for each of the three ships companies, and eight casks of limes were divided among them; the Orpheus had one half of the limes, as her people were the most sickly with fever and scurvy. I got 18 bottles of small French wine for the use of the sick.

On the 28th, I put three gallons of lime juice and six of molasses in 18 gallons of rum (but, by mistake, the steward put in more rum than I directed), to be served, when diluted with water, to the scorbutic people, in the room of grog.

On the 31st we got a little stock out of a prize, which was divided among the three ships.

The porter was served out to the ship's company, as a free gift, a pint a day to each man.—A prisoner, who came from the molasses vessel, complained of inflamed eye.

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He

Aug.]

THE SICK LIST.

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He said it proceeded from the steam of the molasses, when starting it out of one cask into another about a fortnight before; and that all the men who were employed about that business, were affected in the same manner.

One of our men died the 25th, of his fever, at sick quarters.

AUGUST.

The wind was variable and very moderate, but more from the S than any other quarter, till the 26th, when it came Nly, and continued so, but was still moderate until the 31st. It rained the 2d and 15th, with 1 1/2; 3d, 17th, 18th, 19th, 20th, and 27th, light showers; 5th, and 26th, showers; 10th, 11th, 12th, 13th, 14th, and 23d, / . The atmosphere in general was hazy and cloudy, but the 6th, 7th, and 8th we had fogs. New moon the 3d, and full moon 18th. The thermometer was never lower than 68, nor higher than 78.

The sick list varied little, but continued rather increasing until the 12th. On the 13th we arrived at Rhode-Island;—the people of the Orpheus continued sickly all the voyage.

K

The

The dysentery began now to attack the people. I sent to sick quarters on the 14th, one with fever, three with flux, one with bad cough, and three with scurvy. From the 14th the list varied frequently until the end of the month.—On the 28th, one with dysentery, one with vomica, and one with hydrocele, were sent to sick quarters. A third part of the ship's company were sent in their turns on shore, to walk and gather apples, when the ship's duty and the weather permitted. On the 15th we anchored up the harbour, off Prudence.

The patients who complained were, nine of fever, one of pleurisy, five of dysentery, one of vomiting, one of indigestion, three of scurvy, one of rheumatism, one of hypochondria, one of vomica, one of cough, one of eruption, one of strain, two of contusion, two of inflammation, one of abscess, one of furuncle, and one of ulcer:—in all 33.

There were no unusual symptoms either among the fever or dysenteric patients.

SEPTEMBER.

Northerly and NE winds were most prevalent: some days they were variable, seldom

Part I.

calm,

calm, and always moderate; 6th, 7th, 10th, 19th, 22d, and 26th, light showers; 17th, and 23d, showers; 18th, hard showers; 21st, &c. The atmosphere was generally cloudy, sometimes clear, and very seldom hazy. New moon the 1st, and full moon the 17th. The mean height of the thermometer was about 66.

The sick list varied little, but rather increased all the month with dysenteric patients, one of whom died on the 19th; but fever with petechiæ accompanied his flux. Nothing uncommon happened in the dysentery. On the 4th, a corporal and two marines were shot, and one wounded on shore by the rebels; while they were guarding the watering party, above 200 rebels attacked the corporal and six marines, the boat's crew, a midshipman, and the cooper. On the 12th, a man was killed by a fall from the main-top.

Five patients were added with fever, fifteen with dysentery, one with fore throat, five with contusion, two with wound, and two with furuncle:—30 in all. On the 14th, sent one of the fever patients to sick quarters.

OCTOBER.

Northerly winds prevailed more than the Southerly; 1st, 2d, 25th, and 26th were calm, but these calms were not throughout the whole day; it was mostly moderate, and sometimes variable. On the 18th, 27th, 28th, and 29th, gales; 9th, showers; 13th, 18th, 21st, 24th, 25th, 26th, 27th, and 29th, light showers; 28th, heavy rain. The atmosphere was generally hazy or cloudy: new moon the 1st, full moon 15th. The mean height of the thermometer was about 60. From the 22d to the end, the weather became cold.

The sick list rather increased all the month, the dysentery still prevailing. On the 1st, four were sent to sick quarters with dysentery, and one with fever; one died of flux the 10th, and two, with dysentery, were sent to sick quarters. The dysentery was very obstinate, but there was nothing unusual among the fever patients. Nine were added with fever, fourteen with dysentery, one with cholera morbus, two with rheumatism, one with sore throat, three with contusion, one with inflammation, and one with abscess:—in all 32.

N O V E M B E R.

For the first four or five days the wind was Southerly and Westerly (though it froze on the 1st), and then came round to the Northward, varying, with rain, and fixed for two days in the N W with fresh gales. It blew Southerly again for one day, then returned to the N and N W for three days with rain; veered again for a short time to the S W, and gradually came back to the W N W, W, and NW, for ten days, with frost and some snow, blowing strong at times. From the S W it blew fresh one day, varied, became Northerly, then Southerly and Westerly—N W again—variable and Easterly with strong gales. The 12th, 13th, 17th, and 18th, gales; 29th, strong gales, 22d and 23d, short calms; 6th, heavy rain; 5th, 8th, 9th, 10th, 22d, 26th, 29th, 30th, light showers. The atmosphere was generally cloudy or hazy. The moon was full the 14th, and changed the 29th. The mean height of the thermometer was about 46.

On the 18th we dropped down to New-Port; 23d sailed with a convoy, and returned next day. 27th sailed again, and anchored

at Block-Island P M.—28th sailed with a convoy towards Sandy-Hook; 29th, they were all dispersed by the gale of wind. The Diamond, Flora, and Lark, were out on a cruise, and got very sickly from the bad weather, and from infection communicated by prisoners taken out of the prizes. The small-pox was on board the Lark.

The sick list varied very little, but towards the end of the month it was increased by hurt patients. This was the healthiest month we enjoyed in America while the Juno was employed; only twenty-one patients having complained, viz. one of fever, one of head-ache, two of dysentery, one of rheumatism, one of palpitation of the heart, one of cough, two of scald, six of contusion, two of wound, three of inflammation, and one of furuncle.

Two with rheumatism, and one with scald head, were sent to sick quarters on the 19th, and one on the 26th with fever.

This was an agreeable change for the better. Our men were very seldom on shore, and only at first, when we went up to Prudence; and the weather was far colder in February last than it was in this month. On the 21st, six of our men, who had been taken prisoners

the 4th of Sept. returned in a flag of truce, and another of them escaped out of prison. When they came on board, I got them well washed with warm water, then with warm vinegar, and got clean cloaths put on them. Afterwards I gave each of them of Huxham's *Tinct. of Bark*, ʒi. *Tartar emet.* gr. $\frac{1}{4}$ and *Aq. simp.* ʒiss.

D E C E M B E R.

The wind was chiefly from WSW to NE, and, unless in the beginning of the month, when it blew strong gales, was commonly moderate.—The 2d, 13th, 15th, 17th, 18th, 27th, light showers; 29th, gales, with light showers. We had only nine days without frost, and snow fell on four days only. The atmosphere was oftener cloudy and hazy, than quite clear. Full moon the 14th, new moon the 29th:—it was very cold about the end of the month. The mean height of the thermometer was about 44.

We returned to New-Port the 7th; our sick list increased until the 19th, and all the week following decreased, and from the 27th until the end of the month, increased. A fever patient was sent to sick quarters the 12th, and another of fever, and one dysenteric pa-

tient, on the 27th. Query, Did the increase of fever and dysenteric patients proceed from the blowing weather at the end of the last, and beginning of this month?—our hatches being then battened down. (On the morning of the 30th, every thing on board which the wind blew upon, had the appearance of being cased over with ice, it having rained, hailed, snowed, and froze in the night.—The ship's decks were very leaky, many of the men were wet in their hammocks, and a great deal of water was between decks. Most of the fever patients were lying in the bays, where the air is much confined. The man who first complained of the fever this month, was delirious when I was sent for.

The number of patients added to the sick list this month, were ten of fever, four of dysentery, six of rheumatism, five of cough, one of ear-ache, one of hernia, three of confusion, and two of furuncle:—in all 32.

The Nonfuch, Raifonable, and Somerfet were very sickly.—The Nonfuch left England in March, and fifty of her men have been already carried off by fever. Each of these ships has now between 130 and 150 men on their sick list. The fever prevails on board

Part I.

the

the Somerset, and the other two ships have far more scorbutic than fever.—The fever and dysentery raged much to the Southward this last campaign,

JANUARY. 1778.

The wind blew from between NW and SW more than from any other part of the compass. On the 8th, 17th, 18th, 21st, and 29th, we had generally fresh gales, but on the 7th, 27th, and 30th, calms for a short time; at the beginning of the month, there was some frost, and a good deal between the 14th, and 26th; 3d, 8th, 10th, and 18th, light showers; 11th, 17th, light showers with snow; 29th, and 31st, heavy rains; 5th, 20th, 24th, and 25th, snow. Full moon 14th, new moon 28th. The mean height of the thermometer was about 39. The atmosphere was chiefly hazy and cloudy.

The sick list decreased until the 8th,—increased for two days,—decreased until the 22d, and increased again until the end of the month. There were never more than twelve in it. The patients who complained were six of fever, one of head-ache, one of dysentery, one of vomiting, five of rheumatism, one of

fore throat, one of ophthalmia, one of contusion, one of fracture, one of wound, one of inflammation, one of abscess, and five with furuncle:—26 in all.

On the 2d we sailed to Long-Island, and returned the 6th, when we found Lord Howe on board the Eagle:—that ship was far from being healthy. We sailed the 7th, returned the 9th, and on the 20th went up and lay between Rhode-Island and Prudence; 31st anchored at Prudence.—Nothing particular happened among the sick this month,

FEBRUARY.

A moderate Westerly wind for the first five days was succeeded by a short calm; it came to the Eastward on the 6th, and blew violently on the morning of the 7th from NNE with snow; much damage was done by the gale. It was afterwards variable, but oftener from the NW than from any other quarter. The 12th, 13th, 17th, 20th, and 21st, were calm. The atmosphere was sometimes clear, but generally cloudy or hazy, excepting the 11th and 27th, showers; 16th, and 26th, light ditto. It generally freezed from the 6th to the end of the month, and a good deal of
Part I. snow

snow fell. The moon was full the 11th, and changed the 26th. The mean height of the thermometer was 44.

On the 15th we sailed in company with the Cerberus and Haerlem, and 24 sail, chiefly of transports, all carrying flags of truce; towards evening, we and the Cerberus parted from the Haerlem and transports, and on the 21st, P.M., we arrived in Cape Cod bay or harbour.

The sick list varied until the 10th,—rather increased until the 18th, and was afterwards variable until the end of the month. There were never more than 18 in it:—in all 35 were added to it; viz. eleven who complained of fever, one of dysentery, two of scurvy, one of rheumatism, one of hæmoptoe, two of sore throat, two of cough, one of nephritis, four frost-bit, one of scald, three of contusion, one of wound, one of inflammation, one of abscess, one of furuncle, and two of ulcer.

I suppose it will hardly be doubted but that the badness of the weather was the cause of the fever prevailing again.—The surgeon of the Eagle informed me, that the yellow fever appeared

appeared with violence on board of the fleet last summer, between New-York and Chesapeak.

M A R C H.

The 1st, the wind was S W, 2d, *f* S W & W N W, 3d, Northerly with calms; 4th, N W with fresh breezes; until the 21st, it blew variably and seldom strong; 21st and 22d, calms, and airs from N N W; then it was variable, and rather moderate until the 29th, when a most violent gale of wind came on at E S E, veered round gradually to the N W blowing strong gales the 30th and 31st: the frost, with snow every day except the 6th and 8th, continued till the 9th; 10th, 11th, 12th, 13th, and 17th, light showers; 16th, 31st, snow; 21st, 22d, and 23d, frost; 28th, 29th, hail; 30th, showers. We had the atmosphere more clear than usual, but it was frequently hazy and cloudy. Full moon the 12th, new moon 28th. The mean height of the thermometer was between 33 and 34.

On the 1st, the Haerlem came into Cape Cod Bay, with 21 sail of transports; the lieutenant who commanded her, as also his clerk, two midshipman, and a number of the people, were ill of fever. One of her men
Part I. died,

died, and most of them recovered with difficulty. Our second lieutenant caught the infection by being on board of her on duty. She was cleared, and sent as a flag of truce to Boston:—our first lieutenant and my first mate went in her. Several men were taken ill, but, by following the method used in our ship, they soon recovered.—17th, the Centurion joined us with orders from Lord Howe, and on the 19th the Orpheus joined us from a cruise; they had the small-pox on board, and several passengers from Rhode-Island. 25th we sailed, and arrived the 29th, with the Cerberus and most of the transports, at New-Port. Captain Griffith commanded.

The sick list varied from the beginning until the 29th, when it decreased until the end, though very little.—Six complained of fever, one of dysentery, two of rheumatism, six of ophthalmia, one of nephritis, one of itch, one frost-bit, two of contusion, one of inflammation, and three of furuncle:—in all 24.

The patients fewer than in the preceding month; but our men had neither been fatigued nor got wet, excepting the waterers sometimes, and they had an opportunity to purchase plenty of fresh fish and potatoes.

APRIL.

A P R I L.

The wind varied frequently until the 10th, and blew a strong gale the 3d; from the 10th till the 15th, it was Southerly, light airs and fresh breezes, and then chiefly Westerly until the 26th; 19th, 22d, 26th, 27th, Southerly; 23d and 30th, gales; 28th, variable, and NNE afterwards; 3d, 11th with showers; 4th, and 20th, snow; 5th, 15th, 22d, and 30th, showers; 9th, frost and snow; 16th and 17th, light showers. The atmosphere was seldom clear, but generally cloudy or hazy.—Full moon the 11th, changed the 26th. Mean height of the thermometer about 53.

The Venus was at Rhode-Island, and very sickly. The surgeon told me they had lost about fifty men of fever, which still continued to rage on board.—I think he said they became sickly from being crowded with prisoners, and cruising with them on board in bad weather. They were so sickly, that they were obliged to come in before their cruise was out.—Their full complement was 240 men. In what manner he treated them, I did not ask himself, but I am informed by a surgeon, an intimate friend of his, who was on the spot, that he followed the antimonial method.

Part I.

The

The Haerlem came in ; her people are recovering very slowly—9th we sailed and anchored in the Naragancette passage, and relieved the Somerset, which still continued sickly. I am told they buried ninety men of the fever since they left England, seventy of whom were of their best seamen.

On the 2d I sent a contused patient to sick quarters. A man who entered from a transport at Cape Cod, complained in the afternoon of the 3d of fever :—of which he, with two more of her people, had been lately ill. I saw several instances of transports becoming sickly from having sick soldiers on board.—Several of our men were seized with fever, by their having been on board the Somerset on the 9th. One in particular told me, that while he was on board of her, one of her people (who came very near him) smelled very disagreeably to him.

The sick list varied often, but it rather increased until the 14th,—then it altered very little until the 23d, when it began to increase for four days, and after that to decrease. In all, 25 patients complained ; viz. eleven of fever, one of dysentery, one of scurvy, one of sore throat, one of worms, four of confusion,

tufion, one of wound, three of inflammation, one of abscess, and one of furuncle.

When our sick men had leave to go on shore, to walk, they were forbid to go near the Somerset's old hospital; they bought milk. —I began on the 9th to dig a garden.

On the 30th a rebel frigate outward bound passed and fired at us, without hurting any body.

M A Y.

Moderate Southerly and variable winds chiefly prevailed, but when it veered round to the Northward, there was a fresh breeze:—the Southerly winds were the sea breezes. The 1st and 2d, Nly, with showers; 4th, 10th, 16th, 17th, 22d, and 31st, light showers; 8th, 14th, showers; 11th, 12th, 13th, 18th, 19th, 28th, 29th, 30th, dews; 15th, dews with light showers; 24th, dews with /; 27th, hard showers. The atmosphere was more frequently hazy or cloudy than clear,—14th and 15th were foggy. The moon was full the 11th, and changed the 26th. Mean height of the thermometer, about 61.

The sick list varied very little all the month, but rather increased towards the end; but fewer were added to it than in any other

Part I.

month

June]

THE SICK LIST.

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month. The patients who complained were, eight of fever, one of head-ache, two of rheumatism, three of contusion, and one of furuncle:—in all 15 only. Our people had leave to walk on Cannanicut, to gather greens; about the 20th they began fishing with lines; they also bought potatoes.

The Lark had three killed and eight wounded by the rebel frigate on the 30th ult.—On the 4th, sick quarters were broken up at Newport, and all the sick men were carried to Capt. Brenton's house on the Neck, which is converted into an hospital.

J U N E.

The 1st and 2d the wind was Southerly with fresh breezes; 3d, 4th, and 5th, Nly and NE with light airs and fresh breezes; until the 12th, it was Sly, *i. e.* from SE to SW: until the 17th, it was Nly, though generally calm; 17th, 18th, and 19th, sea and land breezes, and calms; 20th, 21st, Sly; 22d and 23d, NE, fresh breezes and calms, and then Sly with frequently calms in the morning until the end. The 1st, 3d, 5th, 26th; light showers; 2d, hard showers; 4th, 7th, 8th, and 21st, showers; 17th,

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11 with light showers; 28th, 1; 29th, and 30th, 1. Dews fell every night when it did not rain, except the two last nights. The atmosphere was generally hazy, sometimes cloudy, and at others clear; the 3d and 6th were foggy. The moon was full the 9th, and changed the 24th. The mean height of the thermometer was about 70:—towards the end of the month, the weather became very hot, and the ground was burnt up.

The sick list varied but little all the month; indeed it did not vary less in any one preceding.—Those who complained were, six of fever, one of head-ache, one of dysentery, one of scurvy, two of rheumatism, one of hæmoptoe, one of sore throat, two of contusion, two of fracture, one of wound, two of inflammation, two of abscess, two of furuncle, and two of ulcer:—26 in all. Nothing particular occurred among them.

J U L Y.

Part of the 2d the wind was N W, 7th was calm, the 12th and 13th, the wind was N W and Nly; the 17th Ely; from the 20th to the 25th, Nly and N N E; throughout the rest of the month it was mostly Sly, but

Part I.

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sometimes it was late before the sea-breeze set in. The 1st, 2d, 3d, 8th, 9th, and 12th, & 1; 2d, 3d, 4th, 9th, 10th, 11th, 14th, 20th, 22d, 23d, 28th, and 29th, light showers:—the squalls always came from the NW. Dews in the night. The atmosphere was not often clear, but generally hazy or cloudy. The 10th, 27th, and 31st, we had fogs. Full moon the 9th,—changed 23d. Mean height of the thermometer was about 74. The weather was frequently very hot.

On the 29th, the French fleet appeared off the harbour's mouth, consisting of twelve sail of the line and three frigates. All our frigates immediately got under way, and went close in to different parts of Rhode-Island.—30th, two of the enemy's ships went up the Narragancette, and two up the Seconnette. P M the King's Fisher, Alarm, and Spitfire galleys were burnt in the Seconnette, to prevent their falling into the enemy's hands. As soon as we got into Coddington-Cove last night, the people were employed about getting the guns on shore, with ammunition, provisions, and stores.—31st, our people were employed as before. Tents were erected ashore.

The sick list rather increased till the 12th, and after that varied and decreased. The patients who complained were, six of fever, two of head-ache, one of dysentery, one of rheumatism, one of cough, one of epilepsy, one of scald, two of contusion, five of wound, four of abscess, five of furuncle, five stung by insects, and one of ulcer:—35 in all. One of the head-ache patients, who is ill of fever, was a prisoner while he was seized with it.

None but a guard slept on board after the 29th.—It is somewhat remarkable, that during such uncommon duty as was performed by our people the three last days of the month, and with so much unavoidable hurry as attended it, no accidents happened among them. Several of them were bit in the tents by insects.—Nothing particular occurred among the patients. On the last day of the month we had only lame people in the sick list.

The Journal ends here very properly. However, I cannot help making mention of a marine, who complained the first of August:—After having been very drunk (probably with bad spirits) and lying in the sun the preceding day, he was seized in the night with various symptoms, and in the forenoon his head ached, he was griped, very thirsty, and complained of weakness. I gave him an emetic, and ordered him an ounce of salts; but as they gave him no stool, and he complained much of his bowels and limbs paining him, towards evening I ordered him a clyster, which procured two stools, with a discharge of much wind, and relieved him greatly, he said:—however, he died in the night. I know not what was the cause of his death, whether it was owing to the liquor he drank, or to a coup-de-soleil, or what; I do not think it was simply fever. He expired in a shorter time than the man who died on the 12th of January, 1777, at New-York, whom I suspected of having drank some bad new spirit.

Although the infection received a very evident check on the 18th of March, by our firing so much, and seemed to be wholly subdued in the month of November following; yet we find it still continued on board, though dormant, and only required some particular circumstance to rouse it into action, which happened in the beginning of December, by a series of bad weather. Perhaps infected clothes had been stolen from some of the men who died, and concealed until those in whose possession they were, used them to shift their own, now rendered uncomfortably wet. From my knowledge of seamen and marines, I think this is more than probable, although I cannot demonstrate it as a fact.

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The MONTHLY STATE of His Majesty's Ship JUNO's SICK LIST, from the 4th of April 1776, to the 30th of July, 1778; the number that died, and of what Disease; the number sent to Hospitals, and for what Disease; and the number who died of Fever at Hospitals.

Years	1776												1777												1778												Collective Numbers			
DISEASES	April	May	June	July	August	September	October	November	December	January	February	March	April	May	June	July	August	September	October	November	December	January	February	March	April	May	June	July	Number of Diseases	Deaths on board	Number sent to Hospitals	Number of Deaths in Hospitals.								
Fever	30	46	16	7	3	5	40	25	50	44	62	34	27	19	13	7	9	5	9	4	8	7	11	6	12	7	6	6	512	7	69	9								
Pleurify		1	1										1				1												4											
Quinsey		1																											1											
Dyfentery		1	5	1	9	16	2		1	1						1	5	15	14	2	4	1	1	1	1		1	1	83	2	11									
Belly-ache		3		1	2	1			1		2			1		2													13											
Cholera Morbus																			1										1											
Worms																1									1				2											
Indigestion										1		2				3	1												8											
Vomiting																	1					1							2											
Rheumatifm	1	1	1	2	1		1	2	9	5	5	3		2	1	2	1		2	1	6	5	1	2		2	2	1	59		6									
Gout	1		2																										3		1									
Scurvy	2		2	3	1			1		7	9	6	3		3	6	3						2		1		1		50		23									
Scrophula									1																				1											
Head-ache					1	2				1	1		1			1				1		1				1	1	2	13											
Giddiness					1							1																	2											
Epilepsy			1	1																							1		4		2									
Sore Throat				1	2					2	3		2	1				1	1			1	2		1		1		18											
Cough	1		2	4	3			3	1	9	5		1			1	1			1	5		2				1		43		9									
Hæmoptysis																							1				1		2		1									
Vomica																	1												1		1									
Hætic	2				1																								3		1									
Ophthalmia						1																1	6						8											
Hæmorrhage			1												1														2											
Ear-ache								1				2									1								4											
Deafness		1			1																								2											
Palpitation of the heart																				1									1											
Singultus		1																											1	1										
Hypochondria																	1												1											
Nephritis		1								3	1												1	1					7											
Diabetes												1																	1		1									
Hæmorrhoides	1	1				1	2	1																					6											
Eruption	1	2			1	1	1									1	1												8		2									
Itch	4	1	1				1																	1					8											
Scald Head						1																							1		1									
Scald	1									1	3												1				1		7											
Excoriation	1		1							1	2	1																	6											
Frostbit									1	1	1	4								2			4	1					14											

Indigestion																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																			
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OBSERVATIONS, &c.

CHAP. V.

SECT. I.

EXORDIUM.

IN the following description, the fever is diurnally described, and the symptoms are arranged as they daily appeared; but it is not to be understood, because some of them are repeated for many days successively, that they have been confined all along to those in whom they first appeared:—on the contrary, they are to be considered as now making their first appearance in other cases. It is also to be understood, that some were seized with more, and others with fewer symptoms, and that

I. 4

they

they were combined very differently with respect to the order in which, for method's sake, they are here arranged. To avoid repetitions, these symptoms are only generally mentioned which were most urgent; but when the fever is on its decline, about the 31st day, and few are then ill, the most remarkable appearances are daily repeated.

Though the symptoms which we have termed diagnostic, generally introduce the fever, it was, at its first appearance, attended with many others. 'Tis highly necessary, I think, that young practitioners should not only be apprised of this, but that they should be made acquainted with all the various appearances which the fever puts on, from its commencement to its termination, in a number of patients living as nearly as possible in the same manner;—and this is the reason I have taken the trouble to describe it so minutely. The more we consider such variety of symptoms occurring in the same disease, among persons living under the same regimen, the more we must be convinced that they are regulated more by the constitution of the patient, than by all other circumstances.

S E C T. II.

The SHIP FEVER described, diurnally.

THE diagnostic symptoms, or those which generally introduce ship fever, are rigours or chilliness, or alternate chills and heats; sickness at stomach, head-ache, universal pains (or, as the sick expresses it, pains all over them, or pains in all their bones), but especially in the loins or back, and a morbid appearance in the countenance, with less or more debility.

But some informed me, that before the shivering and other symptoms were perceived, they had been ailing, or not well, as they said, for several days,—a week or a fortnight,—three weeks—and even a month:—so long did some droop. The duration and violence of the rigours, chilliness, or alternate chills and heats which introduced the fever, varied greatly; and these again were either succeeded by the following symptoms, or accompanied with many of them; and they were very irregular in different persons, both as to their violence and duration.

General debility, universal foreness, or, in their own words, weakness in all their limbs, and foreness all over; great depression, apprehension, despondency, lassitude, faintness, extreme coldness, syncope, and epilepsy; a bitter taste in the mouth, oppression about the præcordia, nausea, retching, porraceous or bilious vomiting, a slight cholera morbus, belly-ache, dysenteric symptoms, diarrhæa with suppression of urine, or the opposite extreme of costiveness; the head either much confused, or disturbed with pain in the temples, or in the back part, or in the forehead; giddiness, or deafness; hæmorrhage at the nose, tooth-ache, sore throat, and relaxed uvula; sensation of swelling about the præcordia, and of the abdomen after chilliness; pains at the præcordia previous to vomiting, uneasiness in the thorax, very acute pains of either side,* resembling pleurisy, urgent cough, and difficult respiration; pain of the side, shooting down into the groin or thigh, pain in both ilia, that descended to the feet, pain

* Violent local pains suspend the patient's attention to, or his sensation of, slighter symptoms—of which they again complain as soon as the violent pain is relieved.

Part I.

reaching

reaching from the crown of the head to the sole of the foot of one side; pain of the right shoulder, pain of the hams. Some, at the very beginning, had great heat, and much perspiration, without any previous shivering† or coldness; and in some furuncles appeared*.

Various degrees of heat and thirst succeeded the rigours and chilliness in different persons. In some, the heat was burning, and the thirst insatiable; and in others both were moderate, though greater than in health. The pulse varied no less; and as all those variations were perceptible throughout the fever, they will be seldom repeated.

Such were the symptoms which at first ushered in the fever.

First Day.—Of those who were seized in the forenoon or afternoon, and complained immediately, numbers had remissions, and were much relieved within the first twenty-four hours by a vomit, which was instantly given; and by a free perspiration procured in

† Perhaps it was owing to their slightness that the patients did not attend to them, though they did precede the heat.

* I suspect those made their appearance before the patient was seized with fever.

the night, by sudorifics and diluting drinks ; and some even recovered by these means—but few had remissions without such assistance.

2.—Many passed a restless night from having no remission ; some had a remission, which, as well as the exacerbations and paroxysms throughout the course of the disease, were very irregular with respect to the period at which they appeared, and their duration. Many had remissions of particular symptoms, while the rest continued as violent as ever ; and these remissions, whether more or less distinct, were generally effected by perspiration, and in some cases by stools,* very seldom by vomiting.† But profuse evacuations, either by sweat or stool, were so far from procuring remissions, that they generally seemed to increase the symptoms. Some were yet chilly—others had alternate chills and heats, and some had sensation of cold in the back only. The most general and the most urgent symptoms were head-ache, lumbago,

* The natural or spontaneous evacuations are here meant.

† This patient came from the hospital the day before, and relapsed.

and universal pain. The head was now affected in a more violent degree with heaviness, lightness and giddiness from looking at any object, together with a burning heat and profuse sweats in the fore-head ; pain of the left eye, or of both eyes, though neither were inflamed ; pain over the eyes, especially in stooping down ; shooting pains in the eyes, and an unusual motion in them ; inflammation of the eyes, with an eruption in the face, which in others was turgid, and the eyes watery. The head appeared swelled ; pain in both ears, and a discharge from the left with pain ; deafness, pain of the one side of the neck and shoulder ;—fore throat, hoarseness, and difficulty of swallowing were greatly increased by either teasing or violent cough ; as in like manner were the giddiness, and the pain in the thorax, the abdomen, and the extremities. The right side was most frequently affected. The stomach and bowels were as much disturbed with pain, nausea, retching, vomiting, costiveness, or purging, as before. Cramps and spasms of the limbs, and pains of the heels, were complained of.—There was now universal uneasiness, besides soreness ; prostration of strength and spirits, and faintness,

ness, while some thought themselves neither well nor ill. A number were troubled with great anxiety, much uneasiness and pain at the heart (as they said, pointing to the præcordia); bitter taste of the mouth, porraceous vomiting and purging, hæmorrhage from the left nostril, expectoration of fetid pus, hæmoptoe, delirium, and petechiæ, were frequent.

The countenance appeared greatly flushed, and the eyes inflamed, as if the patient had drank; or it was pale or fallow, and greatly diseased:—it appeared wild, while the patient thought himself well. There were furuncles on the neck, and an angry eruption on the pained side of the thorax; the tongue was hoit across, foul, or blackish; the pulse was preternaturally full and soft; there was yellowish, viscid, jelly-like discharge from listered parts.

In the afternoon there were many slight and short remissions, but more exacerbations; and the former were followed by violent paroxysms, preceded in several cases with, and in others without, shivering. Relapses happened from, or were hastened by, irregularity; there were

interrupted profuse sweats, and the perspiration, thirst, heat, and pulse, varied much.

3.—A few were sent to the hospital,—some recovered, others were now arrived at a state of recovery, and there were many remissions. But numbers, instead of being relieved, were greatly debilitated and depressed by profuse sweats in the night. Perspiration kept up twenty-four hours procured no remission to some; in others a profuse moisture was diffused all over, and on feeling the pulse, a disagreeable sensation was impressed on the fingers; and this, though not so strong, was perceptible in all, especially during perspiration, or cold, clammy, and uncomfortable sweats. Many passed the night very ill, either from there being no remission of the symptoms, or from exacerbations, or irregular paroxysms, or from perspiration and inquietude.—The rigours held some four hours, and were followed by violent paroxysms.—A sensation of great cold, while the skin was burning hot, and a sensation of chilliness at times, were troublesome. But the most distressing symptoms during the paroxysms (besides all the complaints already mentioned, which were now aggravated by
more

more or less cough, rendering respiration difficult) were, pain of the crown of the head; strictures about the thorax; shooting, wandering, or flying pains; pain in the scrobiculus cordis shooting through to the back, or darting from the right to the left breast; pains across the ossa innominata, of the right buttock, knees, and wrists; a loss of speech in the night, a distorted face, great inquietude, delirium, and death in one case. Both the thorax and abdomen were distressed as before; a bloody discharge from the left ear, the hæmorrhage from the nose, hæmoptoe, various expectorations of viscid, ropy stuff occurred in some cases, and in others very foetid pus was discharged. The stools were still porraceous, and bilious, or watery, or white with high-coloured urine. There was a copious discharge of urine, and sometimes involuntarily. —Some had large eruptions on different parts of the body; raving, and petechiæ.

Great debility, giddiness, heaviness, and lightness of the head, with great despondency and faintness, and a bitter taste in the mouth, were very distressing during the indistinct remission. The limbs were as tired and sore, (to use their phrase) as if they had come off

Part I. •

a long

a long journey; and some felt that peculiar sensation of the back and limbs, commonly expressed by being asleep; an inability to shut the hands, was complained of; internal fore-ness, or, in their words, foreness in the inside. The countenance was still flushed, or sometimes pale, fallow, wild, and greatly dejected; the palate sore, and the tongue not only so, but red and foul in the middle.

4.—A few recovered; others were now become convalescents, a few had remissions all day, and some cold sweats. Profuse perspiration in many, as heretofore, procured no remission; remissions, exacerbations, and paroxysms, were as irregular as ever, and the two latter were more generally violent. The paroxysms severe with raving, followed by sweating at midnight, and exacerbations in the morning. And there was also remission of pain while the uneasiness, heat, and thirst continued. The head-ache was relieved by stools. The most urgent symptoms were frequent shivering, alternate heats and chills, vomiting; the paroxysms being still introduced by shivering, and exacerbations by languor, and heat in the head. In violent paroxysms, the eyes were prominent: these paroxysms were sometimes preceded by cough, and pain in

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the breast; the cough in many cases was dry and urgent, and increased the belly-ache.

The pain was most vehement in parts which had been formerly hurt, particularly about the clavicles; and palpitation at the heart* occurred. The head, eyes, ears, countenance, throat, thorax, and abdomen were still affected as at first; and in some cases without any remission; the cough was sometimes attended with difficult respiration and tremours. The pains were as various and numerous as before, accompanied with tinnitus aurium. The various discharges and evacuations, with expectoration of brown thick stuff, continued, and the diarrhoea with faintness—worms were voided by stool. Some had cold sweats in the night, an interrupted respiration, and a sensation of creeping and wasting of the flesh. The hæmorrhage from the nose increased the giddiness; an abscess which began to form on the neck, before the fever commenced, suppurated kindly, and after being laid open discharged good matter freely. The urine smelled very strong, and the patients were not refreshed nor relieved

Part I.

by

* The patient was subject at other times to this symptom.

by sleep. A green matter was discharged from blistered parts, raving was common, and many had petechiæ. To the same symptoms which prevailed during the remissions on the preceding days, were added terror, momentary partial sweats, depression, breathing through the nose, loss of taste, universal debility and foreboding; and the head-ache and cough were increased by getting out of bed, and sitting up.

There was no alteration for the better in the countenance, and the tongue in some was very foul and much enlarged.

5.—Some recovered, -numbers began to recover, others had remissions, and many had none. Violent exacerbations and paroxysms were more frequent. Remissions were still introduced by perspiration or stools; many passed the night ill from rigours, head-ache, various pains, urgent cough, sweating, inquietude and wandering; shivering for two hours, or chilliness, or alternate heats and chills introduced the paroxysms, which were attended with all the variety and severity of pain, cough, and laborious respiration hitherto mentioned, and likewise with retching, belly-ache, constipations in some, and in others diarrhœa; besides inflammation of the throat, and pain of the neck, there was pain of the

right side of the head, eyes and neck, which shot through to the left temple, on turning the head round; violent pains of the left ear and side of the head, dimness of sight at times, nervous pains, to which the patient was subject, and tremors. Some were chilly at times, others were so all day.—Disagreeable respiration, loss of speech, muttering and singing inarticulately, a ghastly countenance, and death in one case.—Some lay contracted on one side:—the evacuations were little altered; either colliquative sweats, a reeking moisture, or partial profuse sweats continued:—blood and pus, or pus alone, were spit up; the hæmorrhage at the nose, bilious vomitings, porraceous and watery stools continued; and some voided stools mixed with blood and matter; the angry eruptions about the mouth extended up to the nose; an itch-like eruption spread over the body; petechiæ were very numerous; the expectoration of blood and pus, and of pure pus, continued likewise, and the gelatinous discharge from blisters.

All the distressing symptoms before taken notice of during the imperfect remissions still prevailed, together with anxiety and restlessness.

The countenance and tongue had as various
Part I. appear-

appearances as formerly, and the teeth began to be covered with sordes.

6.—A restless, unquiet night; there was continual chilliness, vomiting, and purging, in some cases, and in others sneezing preceded the paroxysms, which were in some cases brought on by being wet; and were still accompanied with pains and other complaints of the head, eyes, ears, throat, abdomen, loins, and extremities; a very urgent cough, which occasioned sickness at the stomach; the head and abdomen were more disturbed than ever, but many thought themselves better at times. Some complained of the belly-ache, accompanied with swelling and tension of the abdomen, pain all down the spine, pain of the ankles after profuse sweating, a sensation of hollowness in the breast, and a sighing kind of respiration; tremors, spasms, delirium, petechiæ, and perfect mania.

The evacuations by the skin, vomiting, stool, and expectoration, and the eruptions, with the appearances of the countenance, and of the tongue, were as various as ever; besides, the countenance was now sooty in some cases, and the lips were very foul; the tongue was rough, slimy, and black on each side.

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In a case with vomica, the breath was very offensive, and there was great thirst though the skin was quite cool.

The same disagreeable symptoms prevailed during the remission as before. Some were arriving at a state of recovery, some advancing in it, and a few recovered.

7.—A bad night from heat, thirst, sweating, head-ache, all the variety of pains, dyspnoea, and cough, hitherto mentioned. In some cases the symptoms as at the beginning continued:—the head, eyes, throat, stomach, and intestines, were still much disordered; heat about the head, pain down the whole spine, pain about the os pubis; the part of the side in which there was excruciating pain, was swelled and tense. Shivering still was frequent; a worm was voided by the nose; relapses with head-ache, the alæ of the nose were distended; some drank often and greedily, looked frequently at their fingers, were agitated with starting and tremors, continual wandering, raving, effusion of tears, involuntary discharge of the fæces, and mania, and these symptoms terminated in death. Expectoration had the same appearances as usual, and was not general. There were numerous
Part I. eruptions

eruptions of various kinds; some like the stinging of nettles, but the itch-like eruptions were the most general, and the most troublesome; petechiæ were observed—the tongue had various appearances, and trembled on putting it out, and the countenance was much diseased.

The remissions were attended with the same train of symptoms as usual—some recovered, and numbers were recovering.

8.—The sick rested ill from shivering, headache, whimsical dreams, raving, starting, working with the hands, oppression and foreboding at the præcordia, and a short, laborious respiration, while the patient thought himself well. Rigours of four hours continuance introduced paroxysms, during which most of the violent symptoms already mentioned still harassed the patients. In some cases, there was no remission for twenty-four hours. Neither the head, thorax, nor abdomen were relieved. Universal pain, uneasiness, anxiety, and inquietude were frequent.—One became scorbutic. The blistered parts, the nose and tongue, were very sore. The face was squalid, the nose contracted, continual raving was not uncommon, and some were even ma-

niacal ; some lay on their backs with a ghastly countenance ; the respiration was very laborious, with a rattling in the throat ; petechiæ were still observed, costiveness was very obstinate, white frothy stools with much flatus, were voided by the assistance of clysters. In some cases the expectoration was free and laudable—in many the reverse was observed. Previous to the cough which brought on the hæmoptoe, there was a sense of great weight about the præcordia ; and after the hæmoptoe a sensation of great heat remained in the same parts. Hæmorrhoides and a prolapsus ani were troublesome to a few patients.

The countenances, eruptions, tongue, thirst, the state of the skin and pulse varied as usual, as also did the remissions, and the number of those who recovered.

9.—The patients were very restless in the night, and troubled with dysuria ; their sleep was not refreshing ; shivering, or alternate chills and heats, very frequently introduced the paroxysms ; but in some cases they were preceded by a stiffness of the neck, or an obtuse pain of the head, with sickness at, and pain of the stomach, and bilious vomiting, were more violent than ever. Some were deaf,

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others

others afflicted with giddiness in the head, which was also very much disturbed with pain, as were the thorax, abdomen, loins, and extremities; universal pains about the joints, urgent cough, costiveness, and diarrhoea were still frequent; prolapsus ani, and much heat about the anus. Some had a dysentery, and great debility, especially of the loins; the voice became rough, the eyes were very much affected, and sometimes constantly shut, unless when the patient was roused. A few were turbulent and unruly, and in some were observed loss of speech; pulse hardly perceptible, and a turning up and rolling of the eyes—two died. Some complained of numbness, or want of feeling; hectic heats were distressing, very offensive pus mixed with blood was expectorated, as was also, in some instances, an exceeding viscid brown stuff.—The eruption about the mouth and nose suppurated, and began to dry; and the itch-like eruption scaled off. The countenance continued to be very much diseased, as well as the tongue, which in some cases was very black, much enlarged, stiff, and very painful; in others it swelled much, and was chopt, and the teeth were covered with fordes. Many petechiæ were still observed,

Some

Some now recovered, and many were recovering.

10.—Inquietude, universal uneasiness, delirium, and shivering were still frequent. The head, thorax, abdomen, loins, extremities, and particularly the joints, were still much and variously afflicted, and the pains in those parts exasperated as much as ever by the cough.—Great hoarseness, and a difficulty and pain in speaking, arose from an enlarged black tongue, and parched fore mouth and throat: some lay on their back, with the mouth open. Tremors and startings were distressing, and petechiæ of different shapes and sizes, with other eruptions of various kinds, were still observable; in one, they spread at the base and became livid. The fallow and much diseased countenance still continued; the tongue and teeth were very foul and black, expectoration was more general; the worst species of which was very yellow and very fetid.

Besides the train of symptoms already mentioned, which accompanied the remissions, there was a sensation as if cold water had been poured on the loins, or down the anterior parts of the thighs. The convalescents ga-

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thered

thered strength very slowly; but some recovered.

11.—Many passed the night very ill, from violent paroxysms and exacerbations, during which the body was afflicted as usual:—rheumatic pains were very common; some were delirious, with a pulse hardly perceptible; and some died. Relapses introduced by chilliness were frequent, and colliquative sweats with sickness at stomach and retching, very distressing. The blood was in a dissolved state; but a few drops of blood from the right nostril, greatly relieved the head in one case. Involuntary effusion of tears, and expectoration continued. Costiveness was very troublesome. There was little alteration on the countenance, throat, tongue, and teeth; only the pellicle began to cast off from the tongue. The eruptions continued. Some convalescents were costive—others had a diarrhoea. Most of them complained of uneasiness, heaviness of the head, giddiness, deafness, languor, and debility.—Some recovered.

12.—Inquietude, cough, and the usual pains distressed many in the night; as did also alternate chilliness, and profuse sweats, and great expectoration, which very much debilitated

litated the sick. Chilliness, or alternate chills and heats, still introduced paroxysms with vomiting and delirium. Exacerbations were very violent, and relapses frequent. Pains in every part, as well as the usual complaints about the head and throat, bitter taste in the mouth, sickness in the stomach, and an uneasy sensation, retching, diarrhoea, costiveness, suppression of urine, and despondency were frequent. Some were yet troubled with partial and momentary sweats. The various eruptions, appearances of the countenance, tongue, teeth, throat, and expectoration were not altered for the better. Hard lumps were voided by the aid of clysters; and in some white specks were observed on the blistered parts: petechiæ still appeared.

Those who had short and uncertain remissions still complained of those symptoms already mentioned; as did the convalescents; and of them it is remarkable, that they often denied their having had any sleep, though they slept well.—Some recovered.

13.—Chilliness at times; relapses, with nausea, and bitter taste in the mouth; paroxysms, and exacerbations of all the various pains, and concomitant symptoms already
Part I. mentioned,

mentioned, were yet frequent, with what the patients called aching of their bones. Costiveness, diarrhoea, universal debility, especially of the joints, and soreness, giddiness, pain of the right ear, and depression, were prevalent. Some were become extremely thin; and numbers were harassed with the itching eruption. Petechiæ and remissions were accompanied with the usual symptoms. The tongue was red and very sore, when the pellicle cast off.

Many of the convalescents were feeble and peevish. Great difference was always perceptible in the pulse, thirst, and state of the skin.—Some recovered.

14.—Many of the patients had restless nights from paroxysms of head-ache, and severe exacerbations of the various pains and cough: but the rheumatic pains, hoarseness, sore throat, and cough were most frequent and violent in the cold winter months*. Relapses, chilliness, bitter taste in the mouth, sickness at stomach, giddiness, heaviness, great debility, languor and depression were distressing. There was a discharge from, and also a pain
in

* The fever continued two years in the ship.

in the right ear; a free expectoration in some cases only; whenever the pellicle cast off from the tongue, another began to form immediately; costiveness, and diarrhoea continued; there were still petechiæ and other eruptions, and a more florid appearance, without that itching formerly mentioned. The convalescents complained of chilliness. Some were still insensible and delirious, and some recovered.

15.—Many passed an indifferent night from languor and head-ache. Numbers were not relieved, but very faint after perspiration in the night; relapse with shivering, chilliness, sickness at stomach, violent paroxysms or exacerbations, with delirium, and in the afternoon three drops of blood from the nose; tremors of the hand, petechiæ, pains in the toes, but especially the left; universal foreness and debility, sore throat and depression. The eyes were inflamed in some cases, and in others sore and painful; the discharge from the ear was less, but still troublesome; costiveness and piles were observed.

The tongue was foul in the morning after sleep, and those who had remissions, as well

as the convalescents, were fatigued with the usual symptoms.—Some recovered.

16.—There was debility and faintness after profuse sweats, and sensation of coldness while the skin was very hot. Irregular paroxysms and exacerbations; alternate chills and heats, relapses, nausea, head-ache, giddiness, universal pains, especially about the præcordia, and about the loins, knees, and ankles: incessant cough, great anxiety, and ghastly countenance, were frequent symptoms; some spoke very indistinctly, groaned, and the tongue was black, yet they thought themselves better. Pétéchiæ, diarrhœa, costiveness, ear-ache, and the itching eruption, remained; the tongue was much diseased, and the teeth were foul.

The sick recovered very slowly, but some entirely.

17.—Some passed the night ill from urgent cough, various pains, and from heat and inquietude; despondency and groundless apprehensions disturbed others; the remission of the cough, pain of the toes, relapses, chilliness, or slight rigours, were succeeded by head-ache, ear-ache, pain about the breasts, and uneasiness of the stomach, giddiness,

diness, debility, depression, tremors of the hand, numbness of the lower extremities, costiveness, a laudable expectoration. Thick urine was voided with pain; in some cases the disagreeable sensation was still impressed on the fingers, in feeling the pulse; eruptions continued, there was an angry furuncle on the right cheek, and the tongue was streaked black. The countenance, thirst, pulse, and state of the skin, differed greatly amongst the patients.

18.—The sick passed a restless night from retching, belly-ache, partial sweats, and various pains already mentioned; the sides, knees, and toes were mostly complained of; and a dry, teasing cough. Relapses with diarrhoea, head-ache, and various pains. Costiveness continued, and diarrhoea commenced. The ear-ache, and a watery discharge from the ear, was troublesome. Some had a disagreeable reeking clammy perspiration. A black blister on the tongue, when the patient awoke in the morning, was a common symptom of disease. The sick were generally feeble and dejected, some of them groaning at times. The eruption began to dry and fall off; the tongue, as well as the countenance,

foul; the itch-like eruption was thickest on the extremities; there were furuncles on the shoulders, and exacerbations towards night.

The convalescents recovered slowly.

21.—Head-ache at times; ear-ache, the universal pains, belly-ache, diarrhœa, cough, dejection, and inordinate craving were most frequent. There was a remission by stools and perspiration. The ear continued to discharge, the livid eruption was troublesome; the countenance was yet diseased, and the tongue foul, sore, and had an uncommon appearance; and the convalescents were very languid, and recovered slowly.

22.—Sickness at stomach, head-ache, giddiness, belly-ache, diarrhœa, scalding and high-coloured urine, cough, dyspnea, debility, universal pains, especially of the upper extremities, were the symptoms most complained of. There was an unnatural motion of the head and hands, and the tongue was still sore.

23.—Some passed a bad night from belly-ache and diarrhœa. Rheumatic pains, ear-ache, cough, the itch-like eruption, debility, languor, and thirst were troublesome. The

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tongue

tongue was dry, but the expectoration was now free and copious.

24.—The head ached, and was confused; the eyes watered, the cough was urgent, costiveness prevailed, and inordinate craving; despondency and depression were distressing; the countenance was much diseased, though the patient complained little; the mouth and tongue were foul; the thirst, pulse, and state of the skin varied as usual: one became scorbutic: convalescents recovered slowly.

25.—Retching to vomit, head-ache, ear-ache, wandering pains, debility, tension of the abdomen, and costiveness; an urgent cough harassed the sick—one became scorbutic. The tongue was still dry and foul.

26.—Some of the sick passed an indifferent night. Retching, cough with pain, and soreness about the breast, ear-ache, and prostration of strength and spirits, but especially weakness of the loins, were the most frequent symptoms.

27.—Head-ache, costiveness, pain and soreness of the abdomen, sickness and languor from sitting up in the hammac, cough, debility, and despondency were yet distressing; the

eyes were glassy, and the tongue was covered at times with a slimy mucus.

28.—A very bad night from inquietude :—some were languid and depressed, and the countenance was yet wild ; many of the convalescents denied that they slept, and the furuncles were not quite healed.

29.—Head-ache, belly-ache, diarrhœa, languor, and the itch-like eruptions, especially about the thighs, were very troublesome. The tongue had the pomegranate-like appearance.

30.—Some passed the night ill from pain and sickness at stomach ; others from ear-ache, head-ache, deafness, or costiveness. Though the patient thought himself pretty well, the countenance was yet diseased. The right side of the scrotum of one of the convalescents, appeared excoriated.

31.—Relapse; head-ache at times, ear-ache, pain of the side, belly-ache, a diarrhœa and craving were observed. The skin was yet fallow, but the lips were beginning to recover their natural appearance.

32.—Wandering and delirium in the night : chilliness, head-ache, pain of the side, diarrhœa,
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arrhœa, and depression continued. The tongue was foul.

33.—Severe head-ache in the morning, a bad taste in the mouth, and an expectoration of something disagreeable. Universal pains and soreness, but especially of the side and breast, and costiveness prevailed. The countenance was yet wild.

34.—A paroxysm in the night, ear-ache, costiveness, and diarrhœa still observable.

35.—Bad taste of the mouth, belly-ache, costiveness, diarrhœa, dysenteric symptoms ever since they were last mentioned, and debility were frequent.

36.—Head-ache, cough, costiveness, and a brown tongue, were now the most obvious symptoms.

37.—Pains of the hips and cough were urgent in the night, but the expectoration was easy and copious; universal soreness and languor were distressing. One was very lousy, and several had been so.

38.—Cough and slight wandering in the night.

39.—Head-ache in the night prevented rest; cough, and expectoration, wandering, diarrhœa, harassed others; the countenance

was wild:—one, when interrogated, started up suddenly, and exclaimed in a loud tone of voice, that he was well. His legs and feet had been cold, he said, twenty-four hours.

40.—The night passed ill from raving and inquietude; one patient was greatly emaciated, and lousy. One convalescent was costive.

43.—The costiveness continued, and the itching eruption on the thighs.

45.—Sent the costive patient to sick quarters for change of air and milk diet.—The patient with eruptions was recovering, and sent to sick quarters the 48th day of his illness; but he had frequent relapses during that time. There was one man who did not recover until the 56th day of his illness*.

* This description is the more valuable, because it is collected from all the different methods of treating the fever.

SECTION III.

OBSERVATIONS *on the preceding* DESCRIPTION.

THE circumstances in the preceding description, which mark the apparent difference between ship fever and the fever described in our Physical Journal, are as follow:

1. The long continuance of ship fever on board.
2. The great length of time to which it ran in many cases.
3. The relapses which many patients suffered before they recovered.
4. The frequent relapses after a perfect recovery. And
5. The great variety of eruptions which accompanied the ship fever, particularly petechiæ.

Could the first of those circumstances proceed from any other cause than the virulence of the infection repeatedly brought on board? of the nature of which, or of the manner of its operating on the system to produce such variety of symptoms, I am entirely ignorant—

ignorant—though its progress and effects are very evident.

Does not the second originate from the patient continuing, while in a feeble state, to live under the influence of the virulent infection?

And do not the third and fourth proceed from the same cause?

Do not the eruptions depend on the constitution of the patient?—even petechiæ, which frequently appeared with the other eruptions, and seem to be, more generally, a concomitant of ship fever, when it is treated without bark, as, for want of a proper supply of that medicine, we were obliged to do,—and as others do from prejudice, and erroneous opinions.

Whether in those queries are comprehended the causes of the circumstances thus marking the difference between the ship and remitting fever, is perhaps of little moment; it is sufficient that their existence indicates a virulent infection, and the consequent necessity there is for the utmost exertion of human skill to subdue it, or at least to render it as mild as the nature of things will admit; and it is one consolation, that, differ as they may in appearance, they are to be cured by the same means, viz. Bark.

Part I.

CHAP.

C H A P. VI.

SECTION I.

OBSERVATIONS ON REMEDIES.

BEING convinced by experience that Peruvian bark alone could be depended on in the cure of fever in hot climates, I could not conceive, notwithstanding the many classes of fever mentioned by authors, and the various methods of cure they recommend, that the ship fever in America, when it appeared on board the Juno, differed so materially from the fever I had formerly successfully managed on the coast of Africa, and in the West-Indies,† as to render my treatment of the one improper for the other. I therefore resolved, after the use of moderate evacuations, to place my dependence on the bark ;

† See the Physical Journal, kept on board his Majesty's ship Rainbow, during three voyages to the coast of Africa and the West-Indies, in the years 1772, 1773, and 1774. To which is prefixed a particular account of the remitting fever on board the Weasel, on that coast, in 1769. *Lond.* 1777, printed for John Murray.

bark ; and this resolution I adhered to as long as my stock of bark would permit me, which was until the end of December, 1776.— Afterwards it was in particular cases only that I could administer it.* That the success of this practice justified my resolution, will appear from the facts hereafter stated.

But the advocates for camphire, antimony, blisters, &c. may probably deny that I wholly depended on bark, seeing I frequently joined one or other of those along with it.† This argument seems at first sight to have weight ; but will avail them little if the following circumstances are duly considered.

First—Until a very short time before the marine died on the 13th of October, I was neither aware that we had contracted infection, nor that the patient was dangerously ill ; he therefore got no bark.

Second—Seeing the men were daily seized with fever ; and reflecting that many of the people might not only be infected, but that

Part I.

it

* When we arrived at New-York, bark was a guinea per pound—a price sufficient to tempt the sellers to adulterate it, and to prevent surgeons of ships from purchasing it.

† See Case I.

it might be a long and difficult task to subdue the infection, I joined the other medicines with the bark, more with a view to make it hold out, than that they would render it more efficacious.—The tartar emetic was most frequently joined with it, as the most convenient evacuant; because it neither added to the bulk of the dose, nor rendered it more nauseous. That evacuations, secretions, and excretions must be duly preserved, whatever the medicines are on which we depend, is indisputable.—But,

Third—Should they still retain their opinion, I refer them to the cases and the tables which shew the events of patients differently treated. Further, if they exclude bark, I challenge any other mode of practice whatever, and will demonstrate its inferior success to the bark method.

Blisters, applied in the beginning of the fever, carried it entirely off in many cases,* especially if they were applied on account of head-ache,—otherwise they produced little or
no

* This is agreeable to what Dr. Lind has said of Blisters, in his Dissertation on Fevers and Infection.

no effect, either by stimulation, or the subsequent discharge.*

SECTION II.

METHOD OF TREATMENT WITH BARK.

BEING in so high Northern latitudes, I imagined that the sick in the beginning of the fever would have received benefit by taking away a little blood; but from repeated trials, I found I was mistaken: for though the pulse and other symptoms seemed to indicate the necessity of diminishing its quantity, scarcely one patient could bear the loss of a few ounces, without either becoming languid or faint, and complaining more afterwards of debility than other patients. Thus I was taught to withhold the lancet; and am now thoroughly convinced that it will not be necessary to let blood in any one case of a hundred of ship fever.—The appearance of the
Part I. blood

* On this head I differ from that eminent Physician, who rests the sole benefit derived from blisters, on the discharge kept up from the part.

blood that was taken away, has already been mentioned in the Diary of the Sick List. But very little information is to be had from thence.

I therefore began generally with a vomit of pulv. ipecac. gr. v. and sometimes tart. emet. gr. fs. which was repeated every half hour, until it operated—either of which was wrought off in the common way, with warm water,* and in the evening gave one of the following sudorifics, and sage or mint tea, or barley-water, to drink after it, through the night.

- R Sal C. C. gr. v.
Opü, gr. fs. fiat bolus.
- Vel Tart. emet. gr. i.
Opü, gr. fs. fiat bolus, hora somni
deglutiendus.
- Vel Effent. Antim. Huxham. gut. xv—xl
Tinct. Theb. gut. xv—xxx secundum ægri ætatem,
Aq. simp. ʒi. fs.
Syr. com. q. f. fiat haustus, hora
somni sumendus.

It

* A vomit, when given upon the first appearance of chilliness or shivering, entirely cured numbers of patients; as Dr. Lind also found, and mentions.

It was seldom thought necessary to repeat the vomit, in the course of the fever.

If blood was taken away in the morning, the emetic was prescribed a few hours after, and the sudorific at bed-time. Otherwise, when the patients complained in the afternoon, and blood was taken from them, the sudorific only was administered that night, and the emetic next morning.

Unless that procured them several copious stools, within a few hours after its operation, I ordered

℞ Sal. cath. amar. ʒi.

Cryſtal. Tart. pulv. ʒij.

Aq. ſimp. bullientis, ʒiv. fiat ſolutio, et adhuc tepida, bibenda; ac poſtea, ad libitum, pulmentario tenui utantur.

But in ſome caſes the cathartic ſolution was divided into four parts, and Cort. Peruv. pulv. ʒi. adminiſtered with each every hour, until it was all taken. At night the following draught was frequently preſcribed.

℞ Tinct. Cort. Per. Huxham. ʒiij.

—— Serp. Virg. ʒi.

—— Theb. gut. x—xxx

Aq. ſimp. ʒi. ſs.

Syr. com. q. ſ. fiat hauſtus.

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And

And in several cases, when the head-ache was violent, a blister was applied to the back.

Next day, being the third or fourth of the patients' complaining, I prescribed the bark.

℞ Pul. Cort. Peruv. ʒi.

Aq. simp. ʒ. iſs. fiat haustus ; ſed, ut viſum, Elix. Vit. gut. vi.—vel Tinct. Theb. gut. xx. vel vini alb. cochlear un. Sometimes the doſe was increaſed to ʒii.

This draught was taken every hour, or every two, three or four hours, as was thought proper ; but two ounces of the following decoction with other medicines was more generally ordered, after the ſame manner.

℞ Cort. Peruv. craſſ. pulv. ʒiv.

Eleuther. craſſ. pulv. ʒij.

Aq. ſimp. cong. iiij. coque ad cong. ij. et cola.

But the bark was always, for the worſt caſes, preſcribed in ſubſtance.—In caſes of conſtipation I joined either from ten to twenty grains of rhubarb, or more frequently ſal. cath. amar. ʒij—ʒiſs ; and ſometimes tart. emet. gr $\frac{1}{4}$.—gr. ſs. When violent pains were complained of at night, I ordered the following anodyne bolus.

℞ Camphor.

R Camphor. gr. iv.

Opii, gr. ss—gr. i. ut visum, f. bol.

And for the convalescents, I ordered an opiate regularly every night.

The drink was either one of those I have already mentioned, or very thin gruel; and those were sometimes acidulated, and sometimes had nitre joined to them.—Clysters and pediluvia were made use of as occasion required.

This was the manner in which I treated the sick until they recovered; but in the meantime I allowed to those patients, whom I thought the properest objects, a little wine from time to time; and when they arrived at a convalescent state, their diet was the most proper that circumstances would admit.

I must, however, acknowledge, that I was much vexed to find the fever was far more obstinate, and more difficult to cure, than it was on board the Rainbow.

Query—Did this proceed from the difference of climate—of the constitution of the patients—or of the nature of the infection? From the virulence of the infection only.

And what was no less perplexing, the patients
Part I. tients

tients would often relapse from very slight causes, when they were nearly recovered.

But the method of treating this disease will be more fully explained in the following cases.

SECTION III.

CASES OF THE FEVER TREATED WITH BARK.

CASE I.

TH O. Lawfon, a marine, aged about thirty, was seized in the morning of the 21st of October with shivering, head-ache, sickness at stomach, and universal pains; and complained in the afternoon. The pulse was then small and quick.—*Emet. statim cepit; et postea, potione diluente utitur.*

2. The vomit operated well, and he sweated in the night, and seemed a little relieved. *Sal, cath. amar. ʒi. dedi:—4 PM* a severe paroxysm came on, with shivering for four hours. *Sudorificum h. f. deglutiit, et vesicatorium inter scapulas fuit admotum.*

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3. He

3. He passed the night very ill from great heat and inquietude. No perspiration. Decoct. cort. Peruv. $\mathfrak{z}$ ij. Tart. emet. gr. fs. sexies in die cepit.—4 P M he became chilly again for a little, and thought himself better, though he complained of pain about his eyes, and was much dejected. The pulse was small, and quick, and petechiæ appeared upon him.

4. Perspiration was perceived on him at midnight; and early A M the head-ache, and pain about his eyes increased, the countenance was much diseased, and bloated; he raved; the skin was hot, and he was thirsty. Medicinam ut heri cepit. At 2 P M a severe exacerbation began: he had three stools, and a scalding from the blister. Camphor. gr. v. boli forma, h. f. cepit ac pediluvio utitur.

5. He sweated a little, but passed a very indifferent night from inquietude, and was no way relieved, except of the scalding. Decoctum cum Tart. emet. et tinct. serp. Virg. $\mathfrak{z}$ fs. adhuc cepit.—etiamque h. f. bolum camphor. sumpsit.—In the afternoon he had less pain, the pulse was firmer, but the petechiæ were more numerous.

6. He became easier after resting the first part of the night, but the pulse was still quick

Part I.

and

and hard. *Omni modo ut heri præscripsi.* Between three and four P M a paroxysm came on, which affected the head much; diarrhoea and belly-ache at times.

7. At midnight the fever remitted, during which the head-ache, heat and thirst were urgent, and he was harassed with cough. *Decoct. cort. ʒij. pulv. sal. nitr. gr. x. mis. quinques in die cepit, et anod. h. f.—vesicatorium renovatum fuit.* He was chilly at times through the day, and purged frequently.

8. Head-ache, great depression, giddiness and thirst were troublesome; the tongue seemed striped red and white, and a little enlarged.—*Camp. gr. v. quatuorque hora præscripsi cum potione nitrosa.*

9. He passed the first part of the night ill from inquietude. A M he had an unrefreshing sleep, and afterwards rambled much. His voice became very rough, his tongue was black, the teeth covered with fordes, and he lost his taste; the countenance was fallow, and much bloated; his eyes exceeding dull, the pulse languid, and the skin dry and hot; but he did not complain.—*Pulv. cort. Peruv. ʒi. Tart. em. gr. ʒ. vin. rub. Oport. ʒiiss. tinct. serp. ʒi. quaque hora præscripsi.* P M he

spoke wildly, and the tongue was black, but the pulse was firmer, and the voice natural. His body was open.

10. There was a remission all night, and towards morning he slept, having afterwards a copious stool. In the afternoon he was much better, and recovered his taste, and complained of universal pains. *Ut heri medic. cepit, ac camph. gr. v. h. f.*

11. He complained of universal soreness, and took his medicines with reluctance. P M his head ached at times, and he was giddy at others,—uneasy, and desirous to sleep; the tongue was clean, but chopt; and he continued better in every respect, having had two copious stools.—*Medicinas tertia quaque hora præscripsi, ac bolum h. f. cum anodyn.—*
Diæta tenui sed nutriente utitur.

12. He perspired and slept in the night, but denied it, and expressed a great desire to sleep; his tongue was dry, and rather black, with fordes about the teeth when he awoke. His body was open, and his countenance became lively. White specks appeared on the blistered part of the back, which discharged freely.—*Decoct. cort. Peruv. ʒij. pulv. cort. ʒfs. tart. emet. grā. quinquies in die cepit, et*
Part b *aliter*

aliter ut heri et vin. paux. subinde. P M he continued recovering, but complained of a cough, probably from being got on deck while the ship was smoking.

13. He had a tolerable night, but denied that he slept; perspired freely, and had a copious stool: but his bones ached, he said. —Medicinam quater hodie cepit, et anod. h. f.

14. He rested well, his tongue healed and became clean slowly, but he was sensibly recovering: though he was not quite free of the fever until the 22d. The most evident symptom of fever about him when he awoke was a black vesicle on his tongue.

He continued to recover until the 30th, when he relapsed with shivering and delirium;—perhaps from his bedding being washed (without my knowledge) and not thoroughly dried, by his messmates, because he was lousy. The symptoms most urgent were, a pain of his side, universal pains, a tooth-ache, and frequent chilliness; he was gently vomited and purged, and had a blister applied to his side; the decoction of bark was given after the same manner as before, and he continued to recover slowly until the 27th, when he was

sent to sick quarters at Halifax, for a change of air and diet.

C A S E II.

James Jourd, aged about 29, a very irregular fellow, was seized the evening of the 28th of October, with shivering for four hours, sickness at stomach, retching, and severe head-ache; which were followed by heat, uneasiness, and inquietude. When he complained on the 29th, he looked wild, and was much dejected. *Emet. statim; ac. hora somni sal. C. C. gr. v. opii gr. ss. boli forma cepit, superbibendo menthæ infusionem ad libitum.*

2. The emetic, which was five grains of ipecacuanha, purged as well as vomited him; and he sweat profusely from the bolus, which relieved his head; but the anxiety continued, and the countenance was much diseased. Dysenteric symptoms were distressing, and the pulse was quicker and harder than natural. *Decoct. cort. Peruv. ʒij. quater in die dedi, et anod. h. s.—PM* he was hot, and looked as if he had been drinking.

Part I.

3. He

3. He passed an indifferent night from heat, thirst and inquietude; but the griping and purging were abated. Decoct. cort. Peruv. $\mathfrak{z}$ iss. tart. emet. gr $\frac{1}{4}$ ut visum, sexies in die præscripsi. P M he thought himself better, though he was still very feverish.

4. The purging was troublesome, his skin was hot, thirst frequent, and the pulse hard.—Decoct. sine tart. emet. dedi, opii gr. ss. ut visum. P M he was better.

5. Thought himself relieved, though he was very hot, thirsty, looked bad, and voided porraceous stools. Ut heri præscripsi. P M an hæmorrhage from the nose, and the purging abated.

6. He had only two stools in the night, and rested well; but his countenance still seemed greatly diseased; he was sick at stomach, and retched at times from urgent cough; his tongue was foul, and the thirst great.—Ut heri præscripsi et vini pauxillum, vel tinct. cort. bis in die. P M he was free from retching.

7. He was easy after a good night, but was still hot and thirsty, and the tongue was dusky in the middle.—Decoct. cort. $\mathfrak{z}$ ij. pulv. cort. $\mathfrak{z}$ ss. tart. emet. gr $\frac{1}{4}$. m. quinquies

in die bibit, et op. ut visum. P M his belly ached a little at times. Camphor. bol. gr. v. opii gr. i. h. f. Pōtio fuit diluens et refrigerans.

8. His countenance and tongue were extremely diseased, he perspired irregularly, his pulse was rather quick and small, but he complained only of being costive.—Pulv. cort. Peruv. ʒi. tinct. cort. ʒij. tart. emet. gr. ʒ. aq. simp. ʒiss. syr. com. ʒiss. misce: secunda quaque hora sumpsit. Vesicator. inter scapulas etiam admovi. P M he was not relieved.

9. He perspired a little in the night, and he had a stool in the morning; the tongue was enlarged, brown, and chopt.—Serpent. Virg. decoct. et cort. Peruv. (Vide Ephemeridem) quarta quaq; h. cepit, et opii gr. i. h. f. P M his pulse was quicker and irregular, but he always said he was better, when his health was inquired after. Had several stools.

10. He had a stool, was delirious, and very restless the first part of the night. A M the pulse was more distinct, but weaker, and the skin was moderately cool; but he lay on his back, as on the two preceding days, with his mouth wide open, by which means his

Part I.

tongue

tongue and throat were so dry, that he could not speak until they were moistened, and then scarce intelligibly. He felt his blisters pain him, and was fond of apples, which he had at pleasure. *Omni modo ut heri præscripsi.* P M he had a stool; there was a black pellicle on the tongue, the pulse was irregular and quick; he had frequent startings, was greatly depressed, and covered with petechiæ of different sizes and shapes. *Pulv. cort. Peruv. ʒij. tart. emet. gr̄i. vin. Canar. ʒij. (et tinct. theb. gut. xx. ut visum) secunda quaque hora sumpsit.*

11. He was much relieved after a good night; he spoke, and was in good spirits; the pellicle, or rather thick black crust, began to cast off from the tongue, and the pulse was firmer.—*Cort. ut heri pomeridiano cepit.* P M a most violent exacerbation came on, with deafness and an effusion of tears; neither the mouth nor teeth could be kept clean, the pulse was very small, and he was costive.—*Camphor. gr. v. h. f. deglutivit.* I suspected that his messmates had given him grog.

12. A slight remission, the pulse being firmer, and the countenance less ghastly; he was costive, and always said he was better,—

Enema

Enema fuit adhibitum, et decoct. serp. Virg. et sp. C. C. gut. xxxv. quarta quaque hora præscripsi. P M he had two stools, in the first there were hard lumps; he coughed and spit up with the utmost difficulty, a blackish and very tenacious stuff, but complained of no pain; spake clearer, and the pulse became stronger.—Cort. et vin. cepit et camph. gr. vi. h. f.

13. He passed a good night, and was much relieved; the tongue was very fore wherever the crust appeared. P M the body was open, and the pulse full and quick.

14. There was a perfect remission after sleeping and perspiring freely in the night. The tongue was now much cleaner, but the crust separated very slowly.—Cort. et vin. ac tart. em. dedi ut heri: diæta tenui et levi utitur. P M his body continued open, and he was cool and easy. H. f. ut postrema nocte.

15. He passed a good night, sweated, and had a stool, though he was disturbed by the ventilator.—Ut heri, et gargarisma utitur. P M a violent paroxysm, I suspected, was brought on by grog. The countenance was flushed, and the eyes much inflamed; the pulse was
Part I. rapid,

rapid, tremors were distressing, and he groaned often.

16. He slept and had a stool in the night; the skin was hot, the pulse quick and irregular, and he spoke indistinctly; the countenance was much diseased; he was again become a little deaf, and though he thought himself better, he was anxious to know if he should recover.—Decoct. cort. $\mathfrak{z}$ ij. pulv. cort. $\mathfrak{z}$ ss. tart. emet. gr $\frac{1}{4}$. misce; sexies in die bibit, atq; tinct. theb. ut visum, et vini paux. subinde. P M the tongue was black, the groaning continued, and he was inclined to sleep. The body was open. Camp. atq; anod. h. f. cepit.

17. He had two stools, and rested tolerably in the night; he coughed and expectorated a laudable pus, and could now put out his tongue, which was blackish; and though the skin was cool, there was a disagreeable quickness in the pulse. His body was open; and he ate some pancake given him by his messmates.—Ut heri præscripsi.

18. He rested ill from his bones aching, he said, from lying in bed; the tongue had the pomegranate appearance, and the pulse small and quick. Cort. ut heri, (sed sine tart.

emet.) et camp. h. f. dedi. P M he groaned without pain, perspired freely, and began to recover his appetite, but still had many petechiæ on him. Anod. h. f. fumpfit.

19. He complained of hunger, after having two stools, and passing a good night; but one crust continued to succeed another on his tongue, which gradually became black, though the pulse was moderate, and the skin cool.—*Ut heri omni modo.*

20. His voice was now become natural, but the tongue was sore and black.—*Corticem adhuc cepit.* P M he was hot and uneasy, I believe from irregularity. Anod. h. f. fumpfit.

21. He was easy and cool, after having a stool, and perspiring in the night.—*Medicinam ut 18vo. præscripsi.*

22. The tongue cleaned and healed slowly.—*Ut heri.*

23. He continued to recover. *Ut heri adhuc.*

24. The pulse became quick, the skin was hot, the tongue and mouth were foul, perhaps from irregularity, but he expectorated laudable pus with his cough.—*Decoct. et pulv. cort. adhuc, ut 18vo. fumpfit.*

Part I.

He

He continued to recover, though slowly, until the 29th, when I sent him to sick quarters. Towards night he became a little hot. I gave him the bark through the day, and an anodyne at night.

C A S E III.

Daniel Wilkins, a marine, aged about 28, a very irregular man, complained the 10th of Oct. 1776, of head-ache and purging.—*Emet. statim, ac anod. h. f. cepit.*

2. Griping was most troublesome.—*Sal. cath. amar. ʒi fs. præscripsi, et anod. h. f. cepit.*

3. He complained more of heat, thirst and head-ache, than of purging; his pulse was fuller and quicker than natural.—*Sal. niri, gr. x. quater indie, atq; potjon. com. dedi.*

4. The head-ache was still harassing.—*Ut heri; ac tinct. cort. Peruv. ʒiij. serp. Virg. ʒi. theb. gut. xv. aq. simp. ʒi fs, sacch. alb. ad gratum saporem; fiat mixtura, h. f. cepit.*

5. He had no complaint. P M his throat was a little inflamed.

6. The inflammation was much the same,
the

the uvula was relaxed, and he had no appetite.—Cort. Peruv. decoct. $\mathfrak{z}$ ij. elix. vit. gut. v. quater in die sumat.

7. He was recovering.—Ut heri, bis in die præscripsi.

8. He returned to duty.

9. He was irregular yesterday, and relapsed at 2 pm. but did not complain until this day pm. of alternate chills and heats; of sickness at stomach, head-ache, universal pains, heat, and great thirst.—Emetic. statim dedi; posteaq; potione diluenti utitur.

10. The vomit operated upwards, and downwards, but the head-ache continued. Cort. Peruv. decoct. $\mathfrak{z}$ iss. elix. vitr. gutt. v. quater hodie sumat. PM he was not relieved.—Tart. emet. $\text{gr}\frac{1}{2}$. tinct. theb. gut. xx. h. s. cepit.

11. His head-ache remitted in the night.—Ut heri omni modo præscripsi. A paroxysm returned at 4 PM with pain of the limbs.

12. The head-ache continued with giddiness and cough.—Cort. Peruv. decoct. $\mathfrak{z}$ ij. tart. $\text{gr}\frac{1}{2}$. ut heri sumat atq; potion. nitros. Vesicat. inter scapulas admovi. PM no remission.

Part I.

13. He

13. He was relieved of his complaints, and was easy and cool.

14. On recovery, decoct. ut heri, atq; elix. vit. præscripti.—From 9 A M to 6 P M he was chilly and giddy.

15. Complained of debility and universal foreness.—Ut heri.

16. On recovery, decoct. atq; elix. vit. adhuc cepit. P M he was irregular.

17. Continued to recover.—Ut heri. At 5 pm. he became chilly, and his head-ache returned. Tart. emet. gr. fs. h. f. cepit.

18. He became easy at midnight.—Decoet. atq; elix. vit. quater in die dedi.

19. He was hot in the night. The itch-like eruption had been troublesome for some time.—Ut heri.

20. He was recovering.—Decoet. et elix. vit. bis in die sumat.—P M a paroxysm came on. Tart. emet. gr. fs. h. f. sumat.

21. About midnight there was a remission, with debility.—Decoet. atq; elix. vit. quater in die sumat. P M sickness at stomach, head-ache, and universal pains returned. Anod. h. f.

22. He rested well the fore part of the night, but complained of weakness, giddiness, and

and sickness at stomach ; his pulse was quick and feeble. Decoct. sexies in die dedi. P M no remission, and diarrhœa was troublesome : —Opii gr. fs. ut visum, atq; decoct. præscripti: vesicator. inter scapulas admovendum, et sal. C.C. gr. v. opii gr. fs. h. f. sumendus; superbib. menthæ infus. ad libitum.

23. A slight remission, though he was disturbed in the night ; he did not sweat, but the thirst continued. Ut heri atq; tart. emet. et decoct. quater in die cepit. P M he was chilly all day, though he was relieved.

24. He complained less of his head-ache, but his skin was hot, the thirst urgent, his pulse quick and small, and he was greatly depressed. Ut heri præscripti. P M an exacerbation came on, and his head was confused and disturbed.

25. He was not relieved; an urgent cough and thirst harassed him; his tongue was dry and white, and he was very feeble. Pulv. cort. 3 fs. et cort. decoct. 3ij. quater in die dedi.

26. He rested ill from having a bad berth, and complained of much pain and soreness about his breast, especially when he coughed ; but the pulse was moderate. Linct. emol.

Part I.

(atq;

(atq; nit. et tart. emet.) q. n. m. quater in die fumend. superbib. pulv. cort. ʒi . vin. rub. ʒi ss. fiat haustus. PM he vomited twice from the linctus.—Omitted the nitre.

27. He passed a good night, having perspired freely, and had a copious stool. A remission of the symptoms:—P M a slight exacerbation, but he was sick from sitting up in his hammac.

28. He had a quiet night, but was very languid, dejected, and looked wild; his body was lax. Rad. serp. Virg. contus ʒi ss. aceti lb. iv. coque ut sint colaturæ lb. ii. cui adde pulv. cort. ʒi . fyr. simp. ʒiv . * coch. ij. quarta quaq; hora capiat, atque vini paux. subinde. P M his skin was cooler and softer, but the pulse languid, and he was frequently purged. Opii gr. fs. cepit.

29. He complained of weakness and the itching eruption only; but the countenance was much diseased, and his tongue had the pomegranate appearance. Ut heri.—P M no alteration, but he had four stools. Pulv. cort. ʒi . tart. emet. gr $\frac{1}{4}$. tinct. theb. gut. xx. vin.

* This is a decoction of Dr. Lind's. See his Dissertation, chap. i. sect. 2.

alb. ʒij. m. fiat haustus, secunda quaq; hora fumend.—pomis libere utitur.

30. He complained only of his blister and thirst, but he still appeared to be much disordered; the diarrhœa continued, and his pulse was feeble. P M the diarrhœa still continued, but his tongue was clean; he became somewhat deaf.—Anod. h. f. cepit.

31. He still looked wild, and was thirsty, craving for different things. Ut heri quarta quaque hora præscripsi. P M the diarrhœa continued, his lips were regaining their natural colour, but he was otherwise quite fallow. Anod. h. f. cepit.

32. The diarrhœa harassed him in the night, and he was thirsty. Ut heri atq; opio ut visum. P M he was much the same. Anod. h. f. atque camp. gr. vi.

33. He passed a tolerable night, and complained little, though he was thirsty, and looked wildly. Ut heri. P M he had four stools in the day. Anod. atq; camp. h. f. fumpfit.

34. He continued to look fallow and wild, and complained of thirst and deafness; his tongue was white. Omni modo ut heri.

Part I.

P M

P M the diarrhoea was yet troublesome. Anodynum h. f. ut supra.

35. He did not sleep, but was quiet in the night. Ut heri adhuc. P M the diarrhoea continued, and he dozed. Anod. ut 33.

36. He had a good night, and complained of nothing; but his pulse was feeble, his countenance diseased, and his tongue brown, and he dozed at times. Ut pomeridiano 29ⁿⁱ præscripsi. P M no alteration. Anod. h. f.

37. His cough disturbed him in the night, and he complained of debility, and of pains in the hips; and expectorated pretty freely. Ut heri, sed sine tart. emet. P M he began to look better, but his cough was urgent. Anod. h. f. cepit.

38. He passed an indifferent night; the cough and expectoration continued. Decoct. ʒij. pulv. cort. ʒij. quater in die sumat; vino etiam adhuc utitur, et anod. h. f.

39. The cough and expectoration continued, and he had two stools in the night; he raved towards morning, and looked wild:—when asked how he was? he answered, loud—that he was brave, starting up at the same time. Omissis med. vini paux. secunda qua-

que hora dedi. PM he said his feet and legs had been cold the last twenty-four hours. Anodynum h. f. cepit, et pediluvio utitur.

40. He passed a restless night from inquietude and raving, and he was greatly emaciated and lousy. Ut heri præscripsi, tertia quaque hora, et ut 38vo præscripsi quater in die, et pediluv. et anod. h. f.

41. He rested badly from raving, and slept am. the expectoration with the cough continued, and his cravings. PM the cough was troublesome, but his appetite began to return. Ut heri.

42. He had a good night, and perspired; he looked better, his pulse was firmer, and his skin warm. Ut heri adhuc. PM he continued better.—Anod. h. f.

43. He continued to recover, but found the eruption still troublesome.—Ut 39 præscripsi.

44. Recovering.—Ut supra.

45. He recovered slowly.—Ut heri.

46. He continued to recover.—Ut heri.

47. Still recovering.—Ut heri.

48. I sent him to sick quarters for the same reason I had sent Lawson and Jourd.

C A S E IV.

William Hurd, aged about 25, of a thin habit, was seized the 11th of October with head-ache, puking, and universal pains. Emetic. statim dedi.

2. He complained much less, and the vomiting ceased. Sal. cath. amar. ℥i. fump.

3. His head was still affected, though he sweated those two nights past. Sal. nit. gr. x. quater hodie sumatur.—Tinct. cort. ℥iij. tinct. serp. Virg. ℥i. theb. gut. xii. f. h. f. a. h. f. sumendus.

4. He slept in the night; but now complained of more head-ache, of pain about his eyes, of heat, thirst, and of his urine smelling strong; his skin was dry, and his pulse quick and small. Cort. Peruv. pulv. ℥i. elix. vit. gut. vi. aq. simp. ℥iss. misce quater in die sumendus. P M he was not relieved. Potione subacida utitur.

5. He was much relieved after having passed a good night; but his head-ache still harassed him, and he was feeble. Decoct. cort. Peruv. ℥ij. quater in die præscripti.

Diæta fit tenuis et levis. P M the paroxysm continued twenty-four hours.

6. On recovery. Ut heri præscripsi.

7. He complained of weakness. Ut 5 medicinam cepit. P M he became hot, thirsty, and felt his head light. Cum decocto suo, hora decubandi, tart. emet. gr $\frac{1}{4}$, dedi.

8. There was a remission at midnight. Ut heri decoct. sumat. P M he complained of weakness only.

9. He passed a good night, and was easy. Decoct. adhuc cepit.

10. He was recovering. Ut heri præscripsi.

11. He was feeble. Ut supra decoct. sumpsit.

12. He recovered.

C A S E V.

John Dance, aged about 30, of a bloated habit, with venereal eruptions, complained, the 12th of October, of head-ache, sickness at stomach, universal pains, and severe gripes. Emet. hodie dedi.

2. His head was still much affected. Cath. hodie cepit. P M tinct. cort. ʒiij. serp. Vir.
Part I. ʒi.

3i. theb. gut. xv. aq. simp. 3ss. facch. alb.
q. f. m. f. h. h. f. fumendus.

3. He was relieved in the night of a pain in and about the left eye, which had affected him, but complained of griping and purging. Pulv. cort. Peruv. 3i. quater in die aq. simp. 3ifs. dedi. P M he was much better.

4. He was now free from the dysenteric complaints, and was recovering. Decoct. cort. ut heri præscripsi.

5. He continued to recover. Ut heri decoct. cepit. P M he became hot and thirsty.

6. He passed an indifferent night from fever and head-ache. Ut heri. At 8 pm. he was much relieved; the paroxysm continued about 12 hours.

7. He sweated profusely in the night, and his lower extremities were painful. Ut heri adhuc. P M the perspiration continued all day, and he found himself feeble.

8. He was easy, but continued to sweat. Decoct. atque elix. vit. cepit. At ten this morning a paroxysm returned, with shivering, and he was chilly all day. Tart. emet. gr $\frac{1}{4}$. atque. decoctum sumpsit.

9. At 8 last night a remission came on; the forehead ached, and he was giddy. De-

coct. cort. ut supra præscripsi. P M he had an exacerbation of head-ache for three hours.

10. At 7 pm. an exacerbation of head-ache came on. Decoct. cort. atque tart. emet. fumat. P M the head-ache distressed him.

11. The head-ache remitted at eight last night, and he continued easy after a good night. Decoct. adhuc quater indies fumat.

12. He was recovering. Ut heri. He thought himself a little chilly in the forenoon, but had no fever on him.

13. He returned to duty.

C A S E VI.

William Folkes, aged about 32, was seized the evening of the 13th of October, with chilliness, which was succeeded by a hot fit, and profuse sweat—he again became chilly, and complained of head-ache, lumbago, and thirst. His skin was hot, and his pulse quicker than natural. Emet. statim dedi.

2. He complained of head-ache being severe, but otherwise he was relieved. Sal. cath. am. $\mathfrak{z}$ ij. fumat.

3. He complained of head-ache and thirst.

Part I.

Cort.

Cort. decoct. ʒiss. elix. vit. gr. vi. quater in die cepit.

4. His head-ache continued. Ut heri. P M his left ear became painful.

5. There was an exacerbation at 8 last night, which remitted about noon; but the heat and thirst continued. Decoct. adhuc cepit.

6. Yesterday, in the evening, an exacerbation returned, and he became easier at midnight. Medicin. adhuc cepit. P M the head-ache was troublesome at times, particularly the left side.

7. The head-ache remitted at midnight. Decoct. quater hodie sumat. P M the usual exacerbation returned.

8. His head was still affected, especially towards night. Ut heri.

9. He recovered very slowly. Decoct. adhuc præscripsi. P M he continued to recover, but complained of cough.

10. He was recovering. Ut heri.

11. He recovered.

In four days he relapsed, and was much worse than before. I treated him as I had done formerly, only that he took the decoction of bark oftener, and ʒss. of the powder with every

every dose. On the 27th day from his being first seized, he was pretty well recovered, when I sent him to sick quarters for the reason I did the former patients.

C A S E VII.

M. L. aged about 20, who lay in a berth with a sick mess-mate, felt a pain of his back for two days, with loss of appetite, and lassitude; and was then (Oct. 21.) seized with head-ache and sickness at stomach—his pulse was quick, and rather hard. Emet. statim dedi et sudorif. h. f.

2. He found himself relieved after perspiring in the night. Sal. cath. am. $\mathfrak{z}$ i. fumat, ac sudorif. h. f. repetivi. P M he neglected taking the salts, and there was an exacerbation. Vesic. inter scap. admov.

3. He complained greatly of head-ache, and was much depressed. Sal. cath. $\mathfrak{z}$ i. crystal. tart. $\mathfrak{z}$ ij. cepit. P M a remission came on.

4. He had a pain, at times, over one or the other of his eyes; he was feeble and dejected, and his pulse varied. Decoct. cort. $\mathfrak{z}$ ij. sal. nit. gr. x. quater in die cepit. P M there was no alteration.

Part I.

5. The

5. The pain affected the right side of the head, eye and neck; and darted through to the left temple, upon turning his head—he was costive. Sal. cath. am. $\frac{3}{4}$ ss. cepit, aliter ut heri. P M the pain continued.

6. His head ached on turning it round. Decoct. atq; elix. vit. gr. xi. quater in die sumat. P M he complained of more head-ache after drinking a little grog. Pediluv. utit.

7. The head-ache, debility, and dejection still continued. Ut heri.

8. There was no alteration, and he was costive. Ut heri atq; cath. leni.

9. He complained much of head-ache at times, and found it preceded by a stiffness of his neck. Decoct. cort. atq; nit. sumat quater in die: et vini pauxillum subinde.

10. An exacerbation of his head-ache returned at 4 am. without the stiff neck. Ut heri, sed decoct. sexies atq; tart. emet. gr $\frac{1}{4}$. ut visum, dedi. P M there was a remission at noon, and he was feeble and giddy.

11. He was easier, but complained of pains in his joints, and sickness at stomach. Decoct. cort. atq; elix. vit. aliter ut 9 præscripsi,

12. The

12. The sickness continued, with an uneasy sensation about the præcordia, and pain of the neck. Pulv. ipecac. gr. v. dedi. P M he was much relieved by the emetick. Sal. C. C. gr. opii gr. ss. in boli forma h. f. deglutivit.

13. An exacerbation of head-ache returned at midnight, and his joints were feeble. Decoct. fexies in die sumat, atq; vin.

14. He complained of heaviness, giddiness, debility, and depression. Ut heri. P M an exacerbation of head-ache came on. Anodyn. h. f. cepit.

15. He passed a bad night from violent head-ache; a sore throat, (which had been troublesome for two days before, though he did not mention it) and great depression. Vesic. inter scap. admovi, camph. gr. 4, tart. emet. gr. $\frac{1}{4}$. boli forma quarta quaque hora deglutiit, superbib. cort. decoct. $\mathfrak{z}$ ij.—aliter ut 9. A M he felt himself rather cold; pm. he was relieved.

16. He was hot, thirsty, and costive. Pulv. rhæi $\mathfrak{z}$ ss. cepit. P M he was easy, but his skin was hot, and his pulse quicker than natural.

Part I.

17. There

17. There was an exacerbation of headache, with heat and thirst—he was much depressed; uneasy at the scrobiculus cordis, and his tongue was sore and streaked black. * Decoct. acet. rad. serp. Virg. cochlear. ij. Ut pro Wilkins 28vo ægrotationis suæ quarta quaque hora dedi atq; vini pauxillum. P M his pulse was quick, irregular, and accompanied with tremours; the skin was hot, and impressed a disagreeable sensation on the fingers; and he was sick at stomach.

18. He passed the night ill with gripes, sickness and retching, though he sweated. The blister discharged freely. There was a remission. Pulv. cort. Peruv. ʒi. tart. emet. gr $\frac{1}{4}$. tinc. theb. gut. xv. vin. alb. ʒij. secunda quaq; hora dedi. P M he was much griped and costive. Sal. cath. am. ʒss. cepit, being averse to a clyster. Vini alb. ʒij. secunda quaque hora dedi.

19. He passed the night indifferently, from pain of his back. Cort. ut heri tertia quaq; hora sumat. P M he had very little sickness at stomach, and was in good spirits.

20. His tongue was foul, he was thirsty

* Vid. 28vo die Wilkins—Case III.

when he awoke, and complained of debility ; the blistered part pained him. Corticem atque vin. adhuc quarta quaque hora, et anodyn. h. f. capiat.

21. He was recovering, but his neck pained him a little. Ut heri præscripti.

22. He continued to recover.—Corticem ut supra ter in die capiat.

23. He was feeble. Corticem bis in die cepit, et vino, ac diæta idonea utitur.

He continued to recover, though slowly, and followed this regimen until the 28th, when he was sent on duty.

C A S E VIII.

William Elliot, a marine, about thirty-two years of age, (a strong man, whose berth was contiguous to a person ill of fever) was seized on the morning of the 14th of Nov. with chilliness, head-ache, and lumbago, and afterwards with alternate chills and heats ; his pulse being somewhat quicker and harder than natural. Emet. statim sumat ; et h. f. sal. C. C. gr. v. opij gr. ss. boli forma præscripti, superbib. menth. infus.

2. He was a little relieved by free perspiration
Part I. in

in the night, and two small stools; and the tongue was white. Sal. cath. amar. ʒi . fumat. PM he complained of alternate heats and chills, of universal pains, head-ache, and thirst; his skin was hot and dry, and he was much dejected. Vesicator. inter scapulas ad-movi, ac bolum sudorificum, h. f. dedi.

3. He passed a restless night from head-ache, pain over the eyes, lumbago, flying pains, and an urgent thirst, though he perspired freely, and the pulse was moderate; his tongue continued foul. Medicinam quam pro Wilkins ægritudinis suæ 28vo (Case III.) præscripsi, cepit, quarta quaque hora, atque sp. C. C. gut. xxxv. superbib. potione diluente. PM he had a very copious stool, and was giddy.

4. He complained of head-ache, especially about his eyes; of pains in his left side and back, of an ill taste in his mouth, and that his tongue was foul. Sal. cath. ʒvi . hodie capiat. PM the medicine operated, but a violent exacerbation, particularly of head-ache, came on; his eyes were ready to start out of his head, as he said. Medicin. ut heri, hodie, sine sp. C. C. octava quaque hora fumat.

5. He

5. He sweated, and the head-ache remitted about midnight; his lumbago was troublesome, and a dysuria (probably from the blister) commenced, and his tongue continued very foul. —Pulv. cort. ʒi. cort. decoct. ʒij. tart. emet. gr̄i. secunda quaque hora capiat. P.M. an exacerbation began at ten am. with a violent shooting pain of the left side; but he now complained less of lumbago and head-ache: his body was lax: bolum sudor. h. f. repetivi.

6. At midnight there was a remission; he sweated as usual, and his pulse continued softer; the pain of his side affected his bowels at times. Ut heri præscripsi. P.M. the exacerbation began at two pm. during which the head-ache was the most severe symptom, attended with cough; but the body continued lax. Bolum h. f. cepit.

7. There was a remission at midnight: he complained of the back part of his head and neck being painful: the diarrhœa continued moderate. Medicinas ut heri cepit. At one pm. a paroxysm came on. Anod. h. f. cepit.

8. The remission began as usual about midnight, with a free perspiration, but he still complained of his side. Ut heri præ-

Part I.

scripsi,

scripsi, mane et vespere. P M he had a slight paroxysm between four and six.

9. At three this morning a slight paroxysm came on, which terminated by perspiration in the forenoon. Medicinam adhuc sumpsit mane et vespere.

10. A paroxysm returned at three this morning, with pain of the side, thirst, and heat, which went off by perspiration. Ut heri. P M he complained of the head-ache. Decoct. serp. sexta quaque hora cepit.

11. He sweated profusely at night, and had three stools; he now began to recover strength, though slowly. Corticem atque corticis decoct. bis in die cepit, et anod. h. f.

12. He sweated profusely, and had a restless night. Ut heri.

13. He was sent to sick quarters, in a promising way of recovery; and he, as well as the other patients whose cases have been related, soon recovered.

C A S E IX.

John Audley, aged about 30, a strong man, and irregular at times, was seized the evening of the 22d of Dec. 1776, with shi-

Q

vering,

vering, head-ache, and universal pains, particularly in his side. Emet. statim, ac essent. antim. gut. xxx. tinct. theb. gut. xxx. h. f. superbib. menth. infusionem capiat.

2. He perspired in the night, and was a little easier. Sal. cath. amar. ʒi . crystal. tart. ʒij . dedi. P M he complained more of the pain of his side: vesicator. lateri fuit admotum, et sudorific. h. f. repetitum.

3. He was relieved of pain, but his countenance was much diseased. Cort. decoct. ʒii . tart. emet. $\text{gr}\frac{1}{4}$. quater in die cepit. P M he complained of severe cough. Anod. dedi h. f.

4. At eight last night a paroxysm came on, during which heat and thirst were great; the cough was urgent, and respiration laborious.— Ut heri, secunda quaque hora præscripsi. At ten A M there was a remission, and he had no pain in the afternoon.

5. A paroxysm returned last night, but I could not learn at what time. He rested ill from inquietude, cough, pain of his side, and dyspnœa. A M he wandered, breathed with much difficulty, looked ghastly, and in the afternoon muttered or sung inarticulately.

Part I.

Jul.

Jul. cardiaci ℥ij. secunda quaque hora cepit;
et vesicator. lateri renovatum fuit.

At six P M he died.*

SECTION IV.

METHOD OF TREATMENT WITH ANTIMONIALS; CAMPHIRE, BLISTERS, &c.

THE same evacuations were now procured, and after the same manner as in the bark treatment, except the letting blood, which I had entirely left off, unless there appeared an absolute necessity for it †. The patients enjoyed every other advantage, and in a greater degree than they had done under

* This is the only case out of 216 wherein the bark can be said to have failed; and had it been given earlier and in substance, the patient might perhaps have recovered.

† The bark method of treatment preceded this, so that none of the patients who were treated in the manner now to be described were let blood in the beginning of the fever, except Wm. James, a marine, one of the first who were seized with it.

the bark method,—as apples, oranges, limes, and wine, which we got out of a prize. The evacuations were carefully attended to, being either restrained when they were excessive, or promoted when they were suppressed, and blisters were applied, as freely. The camphire and tartar emetic were generally prescribed as in the following mixture.

Mixtura Febrifuga.

℞ Camphor. ʒ iſs.
Tart. emet. gr. viij.
Sacchari albiff. ʒ iſſs.

Bene fimul triturenter, deinde gradatim ſago* tenuiffimi uncias triginta adde; atque, ſi viſum fit, Sal. Nitri pur. ʒ ij ſs.—fiat mixtura, à cochleari uno ad tria, vel quatuor, pro doſe:—which was repeated every one, two, three, four, five, fix, ſeven, or eight hours.

In a few caſes, from twenty to thirty grains of theriac, with three grains of camphire, was adminiſtered every fix or eight hours, inſtead of the mixture; and in ſome of the caſes the tartar emetic and nitre were given without camphire.

* This ſuſpended the camphire as well as a ſolution of gum Arabic.

Part I.

SECTION

SECTION. V.

CASES OF FEVER TREATED WITH ANTIMONIALS, &c.

CASE X.

WM. James, marine, aged about 36, naturally slothful, and a tipler, was seized, on the 5th of October, 1776, with head-ache, thirst, pain of the left eye, when he looked at any object, and giddiness, but did not complain until the 6th. His pulse was rather quick and full. Mitte sang. 3xii. et duabus horis elapsis. cath. exhibe. But he became faint and lost little blood.

3. He complained of being weak and faint, which I imputed to his natural indolence. Elix. vit. gut. xx. bis in die sumat.

4. He had a diarrhoea and was still faint.— Pulv. ipecac. gr. iij. opij gr. fs, fiat bolus, quater in hodie sumendus.

5. His complaints were numerous; he had an ague, he said, in the night, and bilious vomiting in the morning. Tart. emet. gr. fs, secunda quaque hora capiat.

Q3

6. He

6. He was seized with vomiting, and purging. Ut 4to præscripsi.

7. He still complained of weakness, but from his bad character, and so little appearance of disease about him, I suspected that his illness, in a great measure, was counterfeit. Tinct. cort. ʒiſs. elix. vit. gut. v. capiat bis in die, and portable soup.

8. I was informed he had been delirious in the night; he continued restless, his pulse was small and slow, and his skin rather cold. I ordered him a spoonful of cordial julep frequently, and wine in his sago; blisters were applied between his shoulders and to his ancles. P M he perspired, but wandered at times, and complained of weakness.

9. He died this morning,

Few having had the fever before this man, and these having been relieved by very simple means, I did not think the infection had been received, or that he was in danger, until the 8th, when it was observed too late.

C A S E X I.

Wm. Hardie, aged about 32, was seized the 12th of January, 1777, about noon,
Part I, with

with shivering, head-ache, and universal pains. Emetic. statim cepit.

2. He complained much of debility, giddiness, and thirst, and his tongue was foul. P.M. his left ear ached, and discharged freely. Cath. lene sumpsit: vesicat. inter scapulas ad-movi.—Towards night he became speechless, his face distorted, and he was delirious. Sudor. h. f. et opij gr. i. dedi.—About two hours and a half after taking his medicines he became quiet, and seemed to sleep. The delirium returned more violent at midnight; and, notwithstanding the opiate was repeated, he continued delirious, and died at three on the third day; not having been ill 48 hours.*

C A S E XII.

John Birridge, aged about 40, was ill of shivering, head-ache, retching and vomiting, several days before he complained (which was on the 19th of Feb. 1777) of being hot and cold alternately, and of great debility. The pulse was quicker, and the skin hotter than natural. Emet. statim dedi.

* Query—Was this patient's death occasioned by the discharge from his ear being suppressed?

Q 4

2. A fe-

2. A severe pain seized the left side with frequent cough, which increased the headache, and the thirst was urgent in the night. Two spoonfuls of the febrifuge mixture was prescribed every two hours. P M his countenance was wild, he wandered, had tremors at times, complained of great languor, giddiness, and incessant thirst; his stools were watery. Vesicat. inter scapulas admovi, et theriac. Androm. gr. xx, camph, gr. iij. boli forma, repet. 8va quaque hora.

3. Partial momentary sweats during the night did not relieve him. Ut postrema nocte præscripsi. P M the watery stools continued, and petechiæ appeared.

4. He rested ill from wandering and inquietude, the skin was hot, the pulse small, the tongue whitish, and he was costive. Ut heri. Enema ut visum sit injectum, P M no better,

5. He continued to ramble, his countenance was sooty; he complained of heaviness about the heart, and thirst, though the pulse was moderate, and his body open. Ut 2da præscripsi, ac vini pauxillum dedi. P M great pain about the scrobiculus cordis, from an

Part I.

incessant

incessant cough, which brought up phlegm only. Vesic. pectori admovi, et anod. h. f.

6, He was somewhat relieved after a quieter night than the two preceding; the tremors or catchings had left him, and his blisters pained him; his tongue was white. Medicinas ut heri cepit, et diæta nutriente atq; vino utitur.

7. Last night the rambling and inquietude returned; the delirium now increased, and he complained of cold. Theriac. Androm. 3 ss. camph. gr. ij. fiat bol.; sexta quaq; hora fumend. PM he became gradually worse, countenance ghastly, the pulse became very feeble, the tongue brown, a rattling in his throat, and he was costive. Enema commune fuit injectum.

8. He rested ill from groaning and inquietude, and had two stools in the night. His pulse was imperceptible at times; he rolled about his eyes, and turned them up while the delirium continued. Pulv. cort. Peruv. ʒi. tart. emet. gr. ¼. vin. rub. Oport. ʒi ss. m. fiat haustus: secunda quaq; hora præscripsi.— He took this medicine but once, for he died at 7 P M.

CASE

CASE XIII.

Thomas Baker, a prisoner, who had been in the West-Indies, and ill on the passage, was coſtive five days before he complained; and gave a very unſatisfactory account of his illneſs: his head-ache had been relieved the day before by an hæmorrhage from the noſe (viz. March 29, 1777): his countenance was ſallow, and much diſeaſed; he complained of univerſal foreneſs and pain about the ſcrobiculus cordis, the pulſe was quick but ſmall, and the tongue white. Sal. cath. amar. $\mathfrak{z}$ i. cepit ſtatim (which gave him ſeveral ſtools); poſtea mixt. febrifug. $\mathfrak{z}$ iſs. quater in die dedi, atq; potione com.

2. The præcordia were now relieved, but he complained of univerſal pains; the pulſe was more moderate:—Mixtur. febrifug. tertia quaq; hora præſcripſi.

3. Severe head-ache, uneaſineſs, and thirſt haraſſed him, and his pulſe was ſtill quick. Ut heri.—P M he was greatly dejected, and breathed diſagreeably through his noſe. Theriac. And. gr. xxv. camphor. gr. ij. boli
Part I. forma

forma octava quaq; hora cepit; et vesicat. inter scapulas admovi.

4. He passed the night very ill from inquietude and delirium; his respiration still disagreeable, and his countenance ghastly. Ut postrema nocte, hodie præscripsi sexta quaq; hora. At one P M he died.—I was informed that he had had a fever not long before, on board the sloop he came from; and that the master died on his passage from the West-Indies. The man was lifeless and dispirited before I saw him; the thoughts of his being a prisoner might add to his depression, though he was as well treated as our own men.

C A S E XIV.

Anthony Gafford, aged about 23, a strong, irregular man, was seized the 12th of March, 1777, with shivering, head-ache, sickness at stomach, and universal pains, especially of the loins, but did not complain until the 13th.—Emet. statim, ac sal. C. C. gr. v. opij gr. fs. h. f. in boli forma cepit.

2. He passed a restless night from coughing; the head-ache continued, his tongue was foul, and his pulse quick. Sal. cath. amar. ʒi. cepit;

pit; et postea mixt. febrifug. cochlear. iv. quater in die. P M he complained of universal soreness.

3. The cough disturbed him much in the night, but his pulse and the head-ache were now moderate. Mixtur. ut heri sumpsit, P M no alteration.

4. His head was much affected in the night by cough, and there was an exacerbation of heat and quickness of pulse. I suspected he had been irregular. Mixtur. adhuc cepit.

5. He passed the night ill from pain in the left side, which was increased by cough; he was very restless and complained of thirst; and the teeth were covered with fordes. Mixtur. ut supra, et linct. emol. ad libitum utitur, Vesicat. lateri etiam admovi,

6. Cough, inquietude, and rambling prevented sleep; respiration became laborious, his tongue was black, and the pulse was not perceptible. Pulv. cort, Peruv. ʒi. tart. emet. gr. m. vin. alb. ʒij. tertia quaq; hora præscripsi.—One P M he died.

C A S E XV.

Wm. Watkins, aged about 37, was seized on the 13th of April, 1777, with violent headache, sickness at stomach, and lumbago; and said he was subject to fits. Emetic. statim cepit, et sudorific. h. f.

2. He was not relieved; the back part of his head ached chiefly. Sal. cath. $\mathfrak{z}$ i. hodie cepit, ac sudorific. h. f.

3. The head-ache still continued. Vesicator. inter scap. admov. et mixtur. febrifug. quater in die cepit.

4. He was very hoarse, and had an urgent cough. Ut heri præscripsi.

5. No alteration for the better, and his pulse was full. Mitte sang. ad $\mathfrak{z}$ viii. et exhibe mixtur. ut heri, ac anodyn. h. f.

6. He complained of griping, and swelling of the abdomen, disturbing him in the night. —Sal. cath. am. $\mathfrak{z}$ i. mane; deinde mixtur. ut antea. P M he had no complaint, but his countenance was wild, and his pulse quick. Camphor. gr. iv. opij gr. fs. dedi.

7. He began to rave, and became very restless at midnight; the delirium continued

through the day, and he looked at his fingers. Mixtur. adhuc cepit. P M effusion of tears; camphor. bol. atque op. h. f. cepit; ac vesicatoria brachijis internis admota fuerunt.

8. The delirium abated, and he passed the night quieter; but his countenance was diseased, his respiration short, and the pulse was small. Theriac. And. gr. xx. camphor. gr. iij. sexta quaq; hora præscripsi. P M no alteration, only the cough was more urgent; ut 6ta h. f. præscripsi.

9. He passed a restless night from an increased delirium; the countenance was ghastly, and his tongue brownish. Ut heri: vesicatus talis internis etiam admovi. P M he was comatose and delirious alternately.—Had involuntary stools for some days.

10. The blisters were neglected to be applied yesterday; the pulse was not perceptible, his teeth were covered with sordes, and his tongue was black. Ut heri præscripsi.

11. He was quieter, and rational at times; but was quite languid, and his pulse scarce perceptible. Ut heri medicinas cepit. At 7 P M he died.

C A S E XVI.

Stephen Hutchins, about 38 years of age, on the 19th of Dec. 1777, was seized with shivering, bad taste in his mouth, head-ache, lumbago, and pain, with a sensation of swelling, about the epigastric region, but did not complain until the 20th. Emet. statim cepit. The emetic operated by vomit and stool.—Tart. emet. et opij ana gr. fs. h. f. dedi.

2. His head-ache and pain in the back were relieved by perspiration in the night; but he was harassed with urgent cough, and soreness at his stomach. Mixtur. febrifug. ter in die; linct. emol. subinde, ac fudorific. ut postrema nocte præscripsi.

3. He passed the night ill from inquietude; and the cough, head-ache and lumbago distressed him at times: he was chilly and hot alternately, the tongue was red in the middle, and thirst was troublesome. Mixtur. quater hodie cepit, ac anodyn. h. f. About two in the afternoon he had a slight remission.

4. About ten last night the exacerbation returned; a tinnitus aurium, soreness, and entire deafness of the left ear, which had been

a little painful for two days; the pulse was slower than natural, and the countenance fallow and diseased. *Mixtur. adhuc cepit, et anod. h. f. tulle urgent.*

5. He complained most of his ear and deafness. *Ut heri præscripsi.*

6. An exacerbation came on about ten last night, with great pain at the scrobiculus cordis, which went quite round the thorax; he had a teasing cough, an unnatural respiration, and was much depressed. *Ut heri, et tinct. serp. Virg. 3i. 11 A M et 4 P M dedi; vesicat. etiam dextro epigastrio admovi.*

7. At 8 A M an excruciating pain seized the right side after he had passed a very restless night:—*opij gr. i. deglutivit, ac volatili linimento linivit:—mixtur. tertia quaq; hora præscripsi. Enema ut visum, et opij gr. i. Et sanguinis 3iv. mitte. P M no remission of the pain, the part was swelled and tense, the breathing laborious, the alæ of the nose were distended, the face was flushed, and covered with sweat, and the pulse was small.*

8. After the third clyster he had a small discharge, with great flatulencies, which relieved him, and soon after he had several white frothy stools: however, he passed an

Part I.

indifferent

indifferent night, neither the pain, hardness, nor swelling being carried off: his throat rattled in his sleep; am. he was faintish when taken out of bed, but became better, and held out very well to sick quarters, where he died.

C H A P. VII.

T A B L E I.

Points out the Superiority of the Bark over all other Medicines administered in Fever on board the Juno.

Under the Bark Method		Under all other Methods	
Were treated on Board	Died on Board	Were treated on Board	Died on Board
216	1	296	6
Proportion	1 in 216	Proportion	1 in 49, nearly

T A B L E II.

Points out the Success of the Methods of treating the Juno's Fever Patients at New York and Rhode Island Hospitals.

To New York Hospital, and treated with Camphire, &c.		To Rhode Island Hospital, and treated with Antimonials, &c.	
Were sent of Fever Patients	Died	Were sent of Fever Patients	Died
36 *	5 †	26 ‡	4 §
Proportion	1 of 7 nearly	Proportion	more than 1 of 7

* Of whom 15 were convalescents.

† Of whom 4 were convalescents.

‡ Of whom several went from a prize without my seeing them.

§ Of whom one was sent from a prize without my seeing him.

TABLE

T A B L E III.

Shews the Proportion of Deaths under the different Methods of managing the Féver.

Fever Patients treated with Bark	Fever Patients treated in all the other Methods on board the Juno, at New York, and Rhode Island Hospitals
216 *	296
Died 1 of 216	Died more than 1 of 26

* A number of patients took bark and recovered, after the time of my general method of treatment with bark expired, who are not here included, but are classed with those under the other methods of treatment.

END OF PART I.

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PART

OBSERVATIONS, &c.

PART II.

INTRODUCTION.

HAVING, upon a careful and impartial review of my Physical Journal and my Observations on board the Juno, seen the great difference between the success of the Antiphlogistic, or debilitating Antimonial practice; and of the Bark, or restorative treatment of fever—no room was left for deliberating which ought to be adopted and rigidly adhered to. Upon this ground, and to establish irrefragably the superior efficacy of the bark, regardless of the expence which I knew must attend the experiment, and however ill I could afford it, I provided myself with supplies from time to time on board of the different ships I belonged to during the war, and since; and have found it succeed beyond expectation in a very extensive practice, as will appear in the sequel.

To prove this, I might insert many hundreds of cases which have succeeded under this method, did I not judge it more conducive to public benefit, to relate particularly the few cases which failed under it; and briefly to lay before the reader corroborating proofs, in tables, of the superior efficacy of bark; trusting that this liberality will induce the learned and discerning reader to excuse those errors which he might otherwise be inclined to censure.

The following observations will therefore, it is hoped, be found as beneficial to mankind as the subject is important. I have been pointed in marking by what means infection was first brought, and often renewed, on board the Edgar, Romney, and Blenheim; notwithstanding Admiral (then Captain) Elliot's uncommon care and assistance in endeavouring to subdue the infection, and preventing its being brought on board, and his great benevolence to the sick. During the late war I was fortunate in sailing with officers, who made it their study to assist me, every way which I pointed out, as well as with their stock and wine.

To bring all the officers over to a full exertion of their authority and example to assist

Part II.

the

the surgeon to subdue infection when introduced, and to prevent its being brought, on board, it is only needful to remind them, that without a healthy ship's company they never can undertake active service, and that to them alone the sole merit of their ships' excelling upon any service entirely redounds; while a surgeon, be his abilities and merit ever so great, is seldom known, and by very few of the officers ever thought of after the ship is paid off; and should the ship by reason of sickness be put past service, in spite of the surgeon's unsupported and unassisted abilities, and best endeavours, at the momentary risk of his life is silently blamed, perhaps d——d by the officers as the cause of their loss of a good cruise.

This Part contains more observations, and exhibits a much wider field for medical attention than the former, for several reasons, particularly, because of the difference of the complements of the two ships. I have therefore thought proper to enlarge the plan of the former edition, by inserting a Monthly Review of the Sick List for the time I belonged to the Edgar, which I am hopeful will engage the reader's attention. The Tables and Cases

are newly arranged ; and altogether comprise a succinct history of the state of health of seldom fewer, but generally more than six hundred men, with many incidental and interesting observations for very near three years. The Edgar was chiefly employed with the Western Squadron.

My sincere thanks are offered to many of my assistants* during the late war, for their attention to the sick, and administering their medicines as they were prescribed.

* Particularly Mr. O'Neil on board the Juno ; Mr. John Wardrobe (now a Surgeon in the Navy) and Mr. John Dickson on board of the Edgar and Romney. Mr. W. Ogilvie, my assistant on board the Blenheim and Salisbury since the peace, unfortunately died last June of consumption.

C H A P. I.

MONTHLY REVIEW *of the* EDGAR'S SICK
LIST, *containing Remarks and Meteorological*
Observations, from 24th of May 1779, until
the End of February 1780.

M A Y.

I WAS appointed the 24th to His Majesty's
ship Edgar, building at Woolwich; and the
pendant was hoisted next day. Few of the
officers were yet appointed.

J U N E.

The ship was launched the 30th. Rendez-
vous were opened in the different parts of the
kingdom to enter men. The number sup-
posed to have entered for the ship exceeded
2000. The officers were appointed.

J U L Y.

The ship was haled into dock, and, after
being sheathed with copper, was haled out
again.

again. Sixteen men were received this month from the Conquestadore. Four complained; three of whom were sent to sick quarters—viz. one with fever; one with rheumatism; and one with wound.

AUGUST.

Ninety-seven were received from the Conquestadore, and forty-six from His Majesty's sloop Sylph. Thirty-one patients complained—five of fever; one of dysentery; one of belly-ache; two of diarrhœa; six of scurvy; one of head-ache; one of sore throat; one of giddiness; one of scald; one of strain; one of rupture; six of contusion; one of fracture; one of wound; and two of inflammation. Four of whom were sent to the hospital, viz. one with flux; one with rupture; one with contusion; and one with fracture. Four of the scorbutic men came from the Sylph sloop, and the other two had been lately at sea. Captain Elliot was superseded for some days by Captain Ferguson.

SEPTEMBER.

We received 162 men from the Conquestadore; 103 from the Greenwich, a receiving
Part II. or

or guard-ship in the river; 4 of the Sylph's men, from the Dunkirk guard-ship in the Downs, who had been at sick quarters; and a Captain, Lieutenant, and 25 marines from Chatham. This month we sailed down the river and cruised some days in the North Sea; and afterwards anchored in the Downs.—29 complained of fever, who chiefly came from the Conquestadore guard-ship at the Nore;—one of dysentery; two of belly-ache; one of rheumatism; one of gout; one of head-ache; three of cough; one of hæmoptysis; one of consumption; one of epilepsy; one of nephritis; one of hæmorrhoides; one of eruption; one of scald; two of strain; one of rupture; ten of contusion; two of fracture; and two of inflammation.—62 in all. Sent only one to the hospital with fever.

Our complement is 600.

O C T O B E R.

Twenty men and 30 supernumeraries came on board from the Dunkirk, and 70 marines with a Lieutenant from Portsmouth, besides numbers who were sent from rendezvous and who entered on board.

In this manner the ship was manned, which
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rendered it absolutely impossible to prevent infection from being brought on board, or the ship from becoming sickly. For all the guardships in time of war are magazines of infection, no less than tenders are. On the 9th we arrived at Spithead, and learned that several ships of the fleet under the command of Sir Charles Hardy, Vice Admiral Darby, and Rear Admirals Graves, Digby, and Sir John Ross, were sickly, particularly the Canada, Intrepid, Shrewsbury, London, and Namur; three or four of which were put past service, so much were they disabled by sickness. It is said the Canada during the last and this month sent 380 to the hospital; and the Intrepid 200, for fever chiefly. The Terrible sent near 200, and the Formidable above 100, for fever. But I am not certain that this account is accurate.

On the 11th I was obliged to go to the hospital with some men that my assistants could not get admitted; viz. one weak fever convalescent, whose disease I was obliged to change to fever before they would admit him; two with fractures; and four with scurvy; the Sylph's men. They had so many fever patients in the hospital, that they had no room

for chronic diseases—unless they were marines; and these, though on the hospital books, were sent to Fortune. One of the physicians told me, “That there were about 2700 on the hospital books, chiefly fever patients; that the infection was extremely virulent; that on board many of the sickly ships, orders had been sent to destroy the bedding and clothes belonging to the sick and convalescents; and that they were supplied with others at Government’s expence.” The treatment of fever on board of the sickly ships was the antiphlogistic or antimonial.

The 17th. Wine was served to the ship’s company, the beer being out. 22d, at one P M the Admiral made the signal to weigh, and the fleet came to sail. I had the sick berth appointed on the larboard side under the fore-castle. We sailed with 41 in the list.—12 were fever and 2 were measles patients. About the 26th catarrhus symptoms became very general amongst the ship’s company. The 28th at noon the fleet anchored at Torbay; and were ordered fresh beef 29th. Our ship’s company at three watches. I purchased some apples and onions for the sick.—30th. A fleet in the Offing. The ship was smoked

with wood fires. I bought turnips for the sick.

One hundred and forty patients complained, viz. fifty-nine of fever; three of measles; one of belly-ache; one of diarrhœa; one of indigestion; two of scurvy; four of rheumatism; sixteen of head-ache; eleven of cough; one of fore-throat; one of hæmorrhage; one of epilepsy; one of blindness; one of nephritis; one of eruption; three of itch; two of strain; fifteen of contusion; five of wound; two of inflammation; two of furuncle; one of abscess; and six of ulcer.—An increase of 78; 35 in it the last day. Five only were received at the hospital; one with fever; one weak and bad habit a long time; two with fracture; and one with contusion and old age.

The thermometer hung in the larboard quarter gallery; and the mean height from the 22d to the end was about 60. The moon was full the 24th. From the 22d to the end, the wind varied from NE round to N, continuing but a short time at one point. 24, 25, 28, 29. and the atmosphere generally cloudy.

N O V E M B E R.

The thermometer was once so low as 42, and never above 63—the mean height 58. The wind veered from S E to W N W and W S W, then to N and N W; back to W, and soon again to N W, varying until it came to E N E; then to N N W and N W; from thence to N N E and Nly, then to the Wrd, N N W and S. 11, 13, 14, 15, 17, 18, 19, 23 H. 22 H, 25, 27, 28. 29 L. The atmosphere was chiefly cloudy, and hazy towards the end, seldom clear. The moon changed the 8th, and was full the 23d.

The number of sick decreased twelve, 128 having complained, viz. sixty-one of fever; four of measles; two of belly-ache; one of diarrhœa; three of scurvy; eight of rheumatism; one of cough; one of mania; two of ophthalmia; one of blindness; fourteen of itch; five of scald; four of strain; one of rupture; seven of contusion; one of fracture; five of wound; one of inflammation; one of furuncle; two of abscess; and three of ulcer. Some slight complaints not inserted.

One died of gout, and one of measles. Sent one with fever; one with consumption;

one with rheumatism; one with blindness; one with mania; and one with fracture; 6 in all, to the hospital. I put onions in the scorbutic men's broth and pease; and allowed them their pint of wine with sugar and elixir of vitriol in it. Tea for breakfast, and two apples each a day. The fever patients' diet was tea, rice and sugar, fresh meat broth and apples, and some half a pint and others more wine a day, as I judged proper. Grog was served to the ship's company. The cough was a very troublesome symptom to fever patients.

On the 13th some beer came on board for the ship's company; but I had wine allowed for those of the sick I thought proper.—16th the fleet sailed. Our people continued at three watches. 19th the round house was inclosed in the sick berth. Half wine half grog was served to the people until the 28th, and then beer. We arrived at Spithead the 24th, and Sir Charles Hardy struck his flag the 26th. The fresh beef was husbanded to last the sick until the day before we arrived at Spithead; the Captain gave them mutton that day, and the ward-room the next day.

As many of the men got drunk with their grog made with three waters, I proposed to the Captain to mix it with four waters; which was done.

The ship was kept clean, frequently smoked and dried with wood fires; and the sick berth was kept clean, frequently sprinkled with vinegar, and aired every day with fires, which is to be understood in future, whether mentioned or not.—45 in the list at the end of the month.

DECEMBER.

Thirty-six complained of fever; two of measles; one of belly-ache; three of scurvy; ten of rheumatism; one of head-ache; nine of cough; eleven of fore throat; one of ophthalmia; one of old age; one of eruption; five of itch; three of strain; four of rupture; nine of contusion; one of dislocation; three of fracture; three of wound; and four of inflammation.—108 in all.

1. 2. . . 3. 24, 25, 26 F. The wind was from the W to the S of W in the beginning of the month; but until the 24th I did not pay much attention to the weather; from that to the 28th the wind was from NE to E, and
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it then got to the S, where it continued until the end. The mean height of the thermometer was about 48. The atmosphere was chiefly either hazy or cloudy. The moon changed 9th, and was full the 24th.

Sent 12 to the hospital, viz. four fever convalescents (three rheumatic men; one with symptoms of stone; one with cough; and one with ulcer, by survey;) and two marines invalided, but sent with tickets; one for rupture; and one for lameness of his hand. Three other men were invalided; one for old fracture and old age; one for rheumatism and old age; and one for old age. The sick list varied frequently, and there were 28 in it only at the end of the month.—A very considerable decrease, 17.

We could get no portable broth at Haslar hospital for the sick. On the 24th we sailed with upwards of 20 sail of the line, with a very numerous convoy of merchant ships, and transports with stores and provisions. The 28th we finished the fresh beef. The cough and sore throat complaints were truly catarrhus, and yielded to neutrals with tinct. cantharid. and gargarisms.

JANUARY, 1780.

The 3d the ships under convoy parted from us, all well.—The 8th AM a strange fleet appeared, and our signal was made to chase. Upon our shewing by signal that the chase were enemies, a general signal to chase was made. Between one and two PM the Edgar brought-to the headmost ship of the enemy, after having in the chase brought-to 16 or 17 sail large and small of them. The Bien-faisant brought-to the enemy's convoy, a new 64 gun ship, afterwards named Prince William, in honour to His Royal Highness Prince William, who was in the fleet on board the Prince George; and one of our frigates brought three or four sail to, to windward. About 23 sail of Spanish ships in all were taken, called the Caracca fleet, bound from St. Sebastian to Cadiz. Two hundred prisoners were brought on board of us PM, and next day above 100 of them were sent to other ships. The 10th, the America parted company with the fleet, being ordered to convoy some of the prizes to England. One midshipman and ten men were sent on board the Prince William, now put into commission. The prisoners lay

in the gun-room, and were got on deck in the day-time. The 12th. Sore throats were very troublesome to some of the fever patients. My first assistant was seized with fever, and my second was ailing. The apoplectic patient became insane. The 13th. The beer was finished; and on the 14th, wine was served to the people.

The 16th. About one P M a signal was made for a general chase after a strange squadron; and when ascertained to be an enemy's, the signal was made to engage them as our ships got up. The Edgar then sailing very well, soon got up with and engaged the sternmost ship of the enemy closely, until another of their ships was observed to hale up to cross our forefoot to rake us; which obliged us to sheer from the ship we were engaged with, to give the other ship our broadside. In the mean time the former blew up, by accident it was thought, and only one man belonging to her was saved, who soon after died of his wounds at Gibraltar. Of the enemy seven sail of the line were taken and destroyed. The 19th. We arrived at Gibraltar, and only found the Panther, with Admiral Duff's flag on board of her, and the Apollo belonging to

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our fleet; the rest were *black strapt**. The 20th. We sent ten men to the hospital, viz. six with wound; one with erysipelas; the maniac, from apoplexy; one with blindness; and one with cough. 22d. One Lieutenant and a party of men were sent to assist in clearing the Caracca prizes. 29th. Seventy-one prisoners were sent on board of us. Our signal was made to slip and chase a Spanish ship standing in to Algaziers, which we ran on shore. 30th. I was seized myself with fever, and a number of the prisoners were ill of it. I could not learn whether they had been sickly on board of their own ships or not. All the fleet did not get into the bay before the 25th.

It is remarkable, that only five complained of fever after the 16th, notwithstanding the ship was crowded with prisoners. This confirms the remark I made on board the Juno, "That infection is greatly checked on board of a ship by its coming to action, or firing a good deal." We had a Lieutenant of marines

* When ships do not get into Gibraltar, but are carried above it with the current, they are said to be *black strapt*.

and five men killed, and twenty wounded in the action, besides several slightly wounded. I was not laid up with my fever attack.

The wind varied from S, back to E N E, N E, and N, returned to the S, and veered round to N W, where it continued several days and blew strong, especially the 16th P M. It got now to W; again returned to the N, and then back again to the W, and was variable to the end. The atmosphere was chiefly cloudy, until the 19th, when we arrived at Gibraltar. The mean height of the thermometer was 61. The 9th, 22, 23, 24, T L. 25. 12, 13, 28, 29, 30, 31. . The moon changed the 6th, and was full the 21st.

The Sick List decreased 28; eighty only having complained, in all; viz. twenty-eight of fever; one of erysipelas; two of belly-ache; five of rheumatism; one of head-ache; two of cough; one of fore throat; one of ear-ache; two of epilepsy; one of apoplexy; one of nephritis; one of eruption; one of scald; six of contusion; one of excoriation; twenty of wound, besides several of slight wounds; one of inflammation; two of furuncle; and three of ulcer.—17 in it at the

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end of the month, which is 11 less than were in it the end of last month.

FEBRUARY.

Thirty complained of fever; one of dysentery; one of worms; three of scrophula; two of cough; one of epilepsy; two of ophthalmia; two of eruption; three of scald; three of strain; one of rupture; fourteen of contusion; two of fracture; one of excoriation; three of wound; two of furuncle; one of abscess; and six of ulcer.—78 in all; so that there is on the whole a decrease of two, though the number of fever patients has increased two; and of contused patients above double;—a class of patients whose number always increases proportionably with the irregularity of the people.—* 18 were sent to the hospital, ten with fever, four of whom were prisoners; two with rheumatism; one with cough; one with eruptions; one with fractured ribs; and three with ulcer.

There were ten in the list at the end of the month—seven less than last month.

* Through mistake, 21 were inserted in the former edition.

The wind was between the Westward and Northward until the 9th, then Eastward until the 17th; then Westerly; Easterly again two days; then between W and N for three days; then E for three days; and after getting to the W a short time, it returned to the E; 1, 18... 2, 17... 3, 4, 9, 10, 11, and 16. New moon the 5th, and full about the 20th. The mean height of the thermometer was about 60.

I recovered the 1st, thank God. The sick prisoners would not take medicine, I therefore applied to send them on shore. 3d. One hundred of our men were sent on board the Prince William. 6th. Eight of the prisoners were sent on shore, by survey, in a cartel. The night of the 9th, a man was seized with fever, and let blood without my knowledge; I therefore gave strict orders that no fever patient should be let blood in future. 10th. Had a berth ordered for the fever prisoners on the starboard side, under the forecastle. 11th. Grog was served to the people. 13th. Sir George Rodney sailed with the fleet and convoy. Our Captain was appointed Commodore by Sir George, to command the squadron left to assist in protecting the place, and Captain Gower his Captain. Besides the Edgar, the

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squadron consisted of the Panther, Porcupine, Enterprize, and Gibraltar armed ship. 14th. The Commodore's broad pendant was hoisted, and he went on shore to visit the Governor. One of the fever patients vomited a live worm. Slight symptoms of fever and cold were general. The Governor came on board the 16th or 17th. I was ordered to take care of all the prisoners, and to superintend the hospital; and my first mate was appointed an assistant at the hospital. Deafness was a general symptom among the fever convalescents. The prisoners were landed the 23d from our ship, and were confined to part of the hospital. There were a number of prisoners on board of a ship which we haled into the Mole the 25th. One watch had leave to go on shore every day. My first mate was appointed Surgeon of the St. Fermin armed ship put into commission; and a private marine on board the Edgar was found qualified to serve as my third mate. Seventeen added to the complement: they include the Commodore and his retinue.

The Commodore was seized with fever, from excessive fatigue and getting wet. His pulse never exceeded 86, and he distinguished the exacerbation himself, by an increase of cough,

cough, which accompanied the fever. After a moderate emetic cathartic and sudorific of James's powder, and the pediluvium, he took the bark freely. He did not recover his strength, nor was quite free of an affection of his breast and cough, until the second day * after we got to sea; and he then found himself perfectly well. I always felt myself affected by the easterly winds at Gibraltar; and until then my health was never affected by any climate or change of weather—except on the coast of Africa in 1769.

A Dr. Blane, who never was in the navy before, is taken under Sir George now Lord Rodney's protection, and was, he said, ordered to superintend the hospital while the fleet was at Gibraltar. I recommended the bark treatment of fever at the hospital, which was adopted*, and also that the bedding should be aired every day in the sun.

* 21st of April.

† About the end of the month.

C H A P. II.

*A LIST of FEVER PATIENTS sent from the Fleet
between the 1st January 1780 and 31st March
following, to Gibraltar Hospital.*

Ships' Names	Number sent	Number died	Remarks, and Proportion of Deaths.
Sandwich	74	5	The treatment of Fever Patients in the Hospital was the Antiphlogistic, until I superintended at the Hospital, then the Bark method was adopted; but from the scarcity of bark, it could not be administered so liberally as I wished.
Prince George	1		
Royal George	3	1	
Resolution	35	2	
Edgar	10	2	
Minorca	1		
Gibraltar	11	1	
Defence	13	4	
Invincible	10	1	
Ajax	110	18	
Alcide	2	1	
Alfred	136	9	
Culloden	3		
Montague	2		
Monarch	1		
Cumberland	23	1	
Prince William	11	1	
Terrible	27	2	
Panther	21	5	
Enterprise	36	1	
Porcupine	6	1	
Fortuné	7	1	
Childers	4		
Hyæna	3		
St. Fermin	18	1	
Navy Ordinary	2		
	570	57	1 in 10
Spanish Prisoners	437	37	1 in 13 $\frac{8}{32}$
			Four of them died in the launch and in landing in Spain.

N. B. This List can only gratify curiosity, without answering any good end; but it would be of consequence to know in what manner they were treated on board their respective ships.

C H A P. III.

MONTHLY REVIEW *continued until the 31st of August.*

M A R C H.

THE number of patients increased 10; and of fever there was an increase of 16; of which 46 complained—one of dysentery; one of belly-ache, one of diarrhœa; eight of scurvy; one of rheumatism; one of ear-ache; one of epilepsy; one of eruption; one of scald; two of strain; thirteen of contusion; two of excoriation; ten of wound; one of inflammation; two of furuncle; three of abscess; and three of ulcer.—98 in all. Three of whom were sent to the hospital; two for fever; and one for cough after fever.

Pains about the thorax, with cough, have been very general and urgent among the fever patients. The liberty men are very irregular. The Levanters prevailed greatly this month; and affected fever convalescents and the wounded men at the hospitals exceedingly, and all weakly people, of whom I was one.

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The appearance of the wounds at the hospital very much altered for the worse, and required dressing twice a day. The Surgeon informed me that his bark was nearly expended. I represented it to the Commodore, and he applied to the Governor, who ordered the Surgeon-general to spare a quantity for the hospital, and to take my receipt for it; which was done. The 12th. 391 men were sent from Spain, in exchange for their sick and wounded, which were sent on shore when our fleet arrived; and they all came on board of our ship in a terrible condition from jails, and fatiguing journeys, many of them without a shift of clothes, and with infection about them. They were distributed among the squadron. Those who were kept on board of our own ship were cleaned by having their old clothes thrown overboard, and being newly flopt. There were several surgeons' mates among them. 14th. I ordered the common dose of bark on board to be reduced from 3i. to 3fs. and not to increase it unless I directed it. One of the assistants at the hospital seized with fever. 20th. Soft bread was served to the squadron, much sand in it. 21st. We haled out of the Mole. The progress of the infec-

tion can be easily traced from the sick to the well, either by contagion or contiguity. 29th. Some men came over from Spain last night, and were treated as those were on the 12th. I gave my scorbutic men vegetable acid, as prepared by Andrews.

Excepting part of the 17th; 25, 26, 30, and 31 when the wind was W and NW; it was E blowing at times in strong flurries. 5, 14, 15, 23, 24, 27, . and 28.. The atmosphere was cloudy or hazy seventeen days, and clear fourteen, though not successively. The moon was new the 6th, and full the 20th. The mean height of the thermometer was 64. Only 10 complained of fever before the men came on board from Spain, so that the number of fever patients was greatly increased by the cartel men coming on board.— 38 in the list at the end of the month—an increase of 28.

A P R I L.

Forty-nine complained of fever; six of dysentery; eight of scurvy; five of rheumatism; one of cough; one of ophthalmia; four of eruption; two of strain; four of contusion; one of fracture; one of wound;

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one of inflammation; one of abscess; and four of ulcer.—88 in all. A decrease of ten on the whole, though the fever patients increased three. Two were sent to the hospital; one for fever; and one for weakness, who came from it the day before. At the end there were 25 in the list.

The wind was from W to NW until the 16th; 17th, and 18th E, but variable; and continued between E and NNE until the 24th, when it became more variable, but was mostly Northerly until the end. 26 and 27 we had calms. The atmosphere was generally hazy or cloudy; clear seven days only. 26. 27.. Mean height of the thermometer 65. The moon was new the 14th, and full about the 19th.

The 5th. A boat came in from Barbary, and brought some fowls and some fruit. I got some lemons for my scorbutic patients. Three of four scorbutic men, who have taken Andrews's vegetable acid, are better. Wine served to the people. The 6th. Part of the prisoners were sent over to Spain; and all of them who were thought fit to be moved were sent over the 8th; and several went who were unfit to be moved, of whom two died in the boats, and two after
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they were landed. 11 of them were left very ill in the hospital. 10th. After having been on shore and overhaling some prize medicines, I found some bark, 24lb. which I gave to the Surgeon of the hospital, by the Commodore's permission. I came on board extremely fatigued and very unwell. 12th. The 73d regiment is very sickly, fever and dysentery. The Surgeon, Mr. Cairncrofs, a very judicious man. I had a most dreadful paroxysm of fever for five hours, during which I took a large dose of cort. and sal. succin. twice. 13th. The Hyæna arrived from England last night. I found great debility, and my head much confused. 18th. Ten of the eleven prisoners left in the hospital are dead. 19th. Ended serving soft bread. My mate came off from the hospital. Sailed the 20th A M with the Hyæna, and next day at noon parted company from her. 22d. I was quite recovered. We spoke the Romney. The sick had mutton broth for dinner. One of my scorbutic patients was very little better for taking six ounces of lemon juice daily for a number of days. 24th. I got a sheep from our mess for the sick, of which I dressed a quarter a day for them. My lemon acid was

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done, I began upon my orange acid. We fortunately got a few lemons out of a ship. On our sailing from Gibraltar, I ordered the common dose of bark to be 3i.

M A Y.

Thirty-five complained of fever; one of dysentery; one of belly-ache; sixteen of scurvy; four of rheumatism; one of ophthalmia; one of nephritis; one of eruption; one of itch; one of scald; two of strain; eight of contusion; two of wound; and two of ulcer.—76 in all. A decrease of 12, and of fever patients a decrease of 14; a very material alteration, though three died of fever, which is more than happened any month before, or while I belonged to the Edgar. One was taken ill 17th, and died 22d; one the 27th, but did not complain until the 28th, and died the 31st; the other complained the 26th ult. and died the 6th of June. Two were sent to the hospital, the one a fever convalescent; the other complained the 24th of hæmorrhagia.—32 at the end of the month on the list.

The wind was between NE and NW the first week, and afterwards mostly between W

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and S W until the 13th, when the ship arrived at Spithead with 16 scorbutic men in the list. Had we continued a few weeks longer at sea, many of the men would probably have fallen down. 9, 10, 11. 31.. T L. The atmosphere was generally cloudy, feldom clear, or hazy and very little fog. The mean height of the thermometer was 62 until the 13th. 1st and 2d. Some lemons were bought—out of a Swede which the Commodore would not let me pay for—for the sick; and he ordered me what fowls or wine I wanted for them. 3d. The men had double allowance of wine for firing at a mark. 9th. Blowed very strong, and wet. 18th. Sir Charles Hardy died, and his corpse was carried from the Fountain in Portsmouth in great state without Landport Gate, and put in a hearse which was waiting for it. During the procession, eight flag ships were firing half minute guns, and his own flag was half mast down.

The moon was new the 4th, and full about 19th.

J U N E.

The fever patients increased five, though the list on the whole decreased 20. Forty complained of fever; three of scurvy; two of rheumatism; two of cough; one of sore throat; one of strain; three of contusion; one of wound; one of abscess; and two of ulcer.—56 in all. Fewer than we have had any month since August. Two died of fever, the one on the 16th; he complained on the 29th ult. and had the violent hæmorrhage the 3d;—the other on the 27th; he complained the 8th, and despaired from his being first taken ill.—4 were sent to the hospital, viz. one with fever; two with scorbutic symptoms; and one with ulcer.—25 were in the list at the end of the month.

1. T L, 2 T; 4, 10, 17, 18. 5.. The wind was E until the 8th, when it got to S W, and was chiefly between that and the N W until the 22d, except the 11th it was calm, as also the 23, 24, 25 and 26 it was calm; 27 and 28 from N E to E; and the 29th and 30th from W to S W. The atmosphere was generally cloudy. The mean height of the

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thermometer was 65. The moon changed the 3d, and was full about the 18th.

The 4th, 5th, and 6th were very cold for the season. We sailed the 8th, under the command of Admiral Geary, in company of 29 sail of the line, and anchored P M in Sand-Down bay. 9th. A M we sailed with the fleet. Our people were still at three watches. The Commodore commanded the ship again as a private Captain. 11th. Cough was the most general and harassing symptom amongst the fever patients. Portable broth made for the sick with vegetables in it, which I bought. 16th. Three sail of the line joined us. 17th. The infection is by no means subdued. One of my mates, a Lieutenant of marines, and the gunner had the fever. I ordered flummery for supper for the sick.

20th. Some directions respecting the sick were sent on board the different ships by the Admiral, to be submitted to the consideration of the captains and surgeons. They contained one useful proposal to exchange salt meat for wine with the purser, and that to be given them as the surgeon sees fit; but from the difficulty and trouble which would attend it, I fear, from experience, that it will not be-

come practicable. The issuing of wine to my own patients, I see, is attended with more trouble than most people will come into, and it would be still more to adopt the proposal. The keeping a wine book with the purser, as well as with the people, the serving it in small quantities to the sick very often, and seeing it given to them, which must be done, employ a great deal of time, give great trouble, and oblige the surgeon and his mates to be almost constantly amongst the sick, when they are numerous. This was the cause of my mates being often ill, and of my being generally ailing, though I never lay by on board the Edgar.

In 1779, before the Edgar went to sea, I wrote to a certain Lord on the subject of supplying each ship according to her rate with a proportion of wine for the sick, at the expence of Government. The good effects of the plan would have been felt on service: it would have given very little more trouble than we had, and the expence would never have been perceived to the country. 23d. One of my mates was seized with fever. 27th. The beer was out, and grog was served to the people, with four waters.

J U L Y.

The list increased considerably, particularly the number of fever patients, which were 56; twelve of scurvy; one of rheumatism; one of giddiness; one of nephritis; three of strain; six of contusion; one of fracture; one of wound; one of inflammation; and one accident happened. At the end, 37 were in it. An increase of 5.—84 complained in all.

The wind varied from N W by N to the E, except on the 3d, when it was W S W until the 27th, then variable between the W and S W; but it was much longer at N E than it was at any other point. The thermometer was never under 64, nor above 74. The atmosphere was generally cloudy or hazy, seldom clear. The moon changed the 2d, full about 16th at night, and new the 31st.—1, 3, 5, 26, and 27. The weather was remarkably cold for the season.

The 3d. we fell in with a French convoy, thirteen of which were taken. 5th. A man dropt over board out of the head, and was drowned. 6th. More bad fever cases than we have had at any time for many months; and numbers have relapsed oftener than once, from

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July]

irregularity. A number of the well men get drunk with their grog. The ship is regularly smoked and dried with fires as usual. 7th. I wrote the following letter to the Captain yesterday.

“S I R,

“THE infection which has existed on board his Majesty's ship under your command, ever since she was manned, having of late become so virulent as to resist the methods that were successfully used formerly to check it; I beg leave to acquaint you, that it will be highly necessary to have recourse to other means for that purpose; and to inform you, that the most effectual which I have ever experienced in a similar case, are frequent smokings of the ship with tobacco. The tobacco ought to be well wet with vinegar, and laid on fires placed in tubs, having water and shot under them, and there ought to be no more fire than is sufficient to light the tobacco, that it may smother away to ashes. Seven fires will be requisite for one smoking, and two pounds of tobacco at least for each fire. All the ports should be barred in, and the hatchways covered

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with tarpawlings when the fires are lighted, and the smoke should be thus confined for three hours at least.

I am, Sir,

Edgar at sea,
Aug. 17, 1780.

Your most obedient,

Humble servant.

R. ROBERTSON."

Captain Elliot, Commander of
His Majesty's ship Edgar.

To which CAPTAIN ELLIOT returned the following Answer.

"SIR,

"I HAVE received your letter of this date, and have given directions to the purser of his Majesty's ship under my command, to supply such quantities of tobacco, as you may from time to time think it necessary to demand for the purpose of smoking the said ship, to check the progress of the infection therein, agreeable to your recommendation.

I am, Sir,

Your most humble servant,

JOHN ELLIOT."

Mr. Robertson, Surgeon, Edgar.

June]

THE SICK LIST.

281

8th. One died of fever, who was added the 3d. I prognosticated his death the moment he first complained; and one of my mates was added with fever. Wine was served to the ship's company. The discharge from blisters is yellowish gelatinous serum, very viscid. 10th. The master at arms was seized with fever from going down into the fore cockpit, while the ship was smoking with tobacco. 12th. It is observed that the waiters, after-guard and marines are chiefly affected with fever. Two sail of the line joined us.

6th. Half a chest of lemons was got out of a Swede, half of which I bought for the sick. One of the gentlemen was seized with fever, from lying below while the ship was smoked with tobacco.

One division of the well men aired their bedding every day by turns, for which there was a standing order from my application to the Captain on the subject long ago, and the men were glad when it came to their turn. The sick's bedding was aired every day, and the utmost care was taken to keep the ship clean, dry, and well ventilated.

Greater diligence to get the ship healthy and keep her so, could not possibly be exerted,
than

than was by Captain Elliot and the first Lieutenant, Mr. Forbes, an old deserving officer in the service, who was pointed in executing the Captain's orders respecting the men's health. Every thing which I proposed for that purpose was put in practice.

AUGUST.

Though the diseases were few in number, the list increased greatly with scorbutic men—150 in all complained; 34 of fever, a decrease of 22; one of belly-ache; one of costiveness; eighty-nine of scurvy; one of epilepsy; one of scald; eleven of contusion; one of strain; one of excoriation; three of wound; two of inflammation; one of abscess; and four of ulcer. The general increase 65.—One died of fever 13th, of relapse from misconduct; one was sent to the hospital for fever, and twenty-six for scurvy and other complaints to Haslar and the sick tent.

2d. The Inflexible and Buffalo joined us; the Captain of the former died on his passage. The fleet spoke a large outward bound convoy under the conduct of the Ramillies. The 3d I finished my vegetable acid; it has been very
 Part II. useful,

useful, but too expensive for a surgeon to find. My mate recovered. 4th. One of the Lieutenants complained of fever. The fever convalescents became scorbutic. 11th. Three French ships were taken—wine was served to the men. 12th. The Captain sends me all the milk his cow gives, which I see divided among the worst patients, with boiled rice and sugar. I give the worst scorbutic cases lemon juice and sugar with their wine; and I mix the wine of other patients with a sort of beverage well fermented like mawbey, and serve it several times a day. 13th. We had a box of lemons sent on board for the sick, taken out of some prize, for the benefit of the sick of the fleet. The Valiant joined the fleet. 16th. The Captain has been pleased to consult me several times about the best method for managing the scorbutic men of the fleet when we get into port; and says, that he will call upon me for my opinion in writing, before we come to an anchor. 17th. I delivered my report of the effects of smoking with tobacco as follows:

“SIR,

“ON the 6th July last, when I represented to you that the infection was be-

come so virulent, as to render it necessary to have recourse to other means than had formerly been used successfully to check it, the number of fever patients on the sick list was fifteen; and that for some days, before, had been increasing by two or more daily. Since that period the ship has been smoked five times with tobacco, after the manner I proposed, only adding sulphur with the vinegar to prevent the tobacco from being embezzled, which it fully answered—And

“ I have now the pleasure to acquaint you, that the number of fever patients is reduced to four; and that four only have complained of fever for the last twelve days.

“ Should you think proper to represent the matter to the Lords Commissioners of the Admiralty, I am of opinion, it might be productive of future benefit to the service.

I am, Sir,

Edgar, at sea,
Aug. 17, 1780.

Your most obedient,
Humble servant,
R. ROBERTSON.”

Captain Elliot, Commander of
his Majesty's ship Edgar.

17th. Twenty men were pressed out of a Weymouth privateer by our ship, and brought on board. 18th. I gave my opinion of the
Part II. method

method which I judged best for recovering the scorbutic men of the fleet, to the Captain in writing as follows :

“SIR,

“IN obedience to your desire that I would communicate to you, what in my opinion is the most expedient method to recover the scorbutic patients, I am to acquaint you, my opinion is to lodge them on shore in good tents ; to supply them daily with new baked soft bread, with a proportion of milk if possible ; with vegetables in their broth every day ; but in particular with half * an allowance of wine if they are served beer ; otherwise with a whole allowance, mixed with a proportion of lemon juice, and of brown sugar or melasses, of which I would administer so much at a time to each as I thought proper.

I am, Sir,

Your most obedient,

Edgar, Aug. 18, 1780.

Humble servant,

R. ROBERTSON.”

Captain Elliot, Commander of
His Majesty's ship Edgar.

* This quantity for the weakest patients would not be too much ; and for other patients three, or even four times the quantity would not be too much, at least for most of them.

As

As soon as the fleet came to an anchor at Spithead, the Captain went on board the Admiral and delivered my letter; a council was held by the Admirals and senior officers on the business, and the *spirit of this plan* was adopted, and put immediately into execution; but whether the minutiae were, or not, I cannot say. Tents were immediately erected on shore, the scorbutic patients sent to them, they were dieted nearly as I proposed, and the Admiral's surgeon superintended them. However, they were sent with sick tickets, and entered on the hospital books, as if they had been received into it.

Our ship's company had an extraordinary quantity of vegetables in their fresh broth, which was made every day for them while we remained in port.

31st. There were 13 in the list.

Until the 14th, the winds were chiefly Northerly and Eastward, and then S W until we got to Spithead on the 18th. The weather was moderate, though cold for the season—8th, 9th, 12th, and 13th were calms, and 12th, 14th. The atmosphere was generally hazy. The moon was full 14th P M.

Part II.

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C H A P. IV.

A LIST of the SHIPS, whose weekly Accounts were sent to the Admiral, which were most sickly when we arrived at Spithead, with the Number of the Sick.

Ships' Names	Number of Sick	Remarks
Barfleur	95	
Britannia	187	
Royal George	52	
Edgar	90	—Every man with the slightest complaint was included in the Edgar's Sick List.
Bellona	161	
Alexander	136	
Namur	75	
Queen	210	
Formidable	126	
Princess Amelia	158	
Union	83	—These are the numbers stated in the weekly account, the week before we arrived; and as the number increased greatly the last week on board of the other ships, it is reasonable to suppose they were proportionably increased on board of them.
Duke	94	
Ocean	100	
Dublin	80	

There were some very sickly ships which either went to Plymouth, or were not given in when my List was made out; but this can answer no other purpose, than to gratify curiosity; as I observed before of the list of men sent to Gibraltar Hospital. No practical improvement can be founded on partial statements. To expiscate the truth, a faithful and complete register is necessary, during the whole time a ship is employed. From partial statements false conclusions are drawn, to the disgrace of medicine, and the ruin of the service.

Part II.

C H A P.

C H A P. V.

*The MONTHLY REVIEW continued until the 7th of
May, 1782.*

S E P T E M B E R.

OUR sick list decreased 77, as 73 only complained, viz. fifteen of fever; fifteen of dysentery; one of costiveness; two of retching; five of scurvy; two of rheumatism; one of gout; one of head-ache; five of cough; two of sore throat; four of epilepsy; one of eruption; one of itch; eight of contusion; three of strain; one of rupture; one of excoriation; one of wound; and three of ulcer; besides one accident. One died of fever, whose death I predicted when he first complained; and one was drowned in getting a top-mast up: and 32 in all were sent to the tent and hospital, of whom seven were sent unknown to me, and one of them was an invalid; two were sent to a guardship for harbour duty, and four were invalided. There were fifteen in the list at the end of the month.

U

First

First day six were surveyed, and four of them invalided for gravel, consumption and old age; the other two were sent on board of a convalescent ship, their diseases called fits and rheumatism. 2d. Sent eleven convalescent scorbutics to the tent.—7 were sent to Haslar without my knowledge the 6th to be surveyed, of whom only four were in the list—one of fever; one of rheumatism; one of diarrhoea; two of contusion; one of ulcer; and one of rupture. These seven, and the six sent the 1st, should be deducted from 32, the total number of hospital cases. 9th. Two marines who were in the list were sent to quarters to be exchanged. Our men were brought off from the tent. 11th. Seven were sent to the hospital—three of scurvy; one of epilepsy; one of rupture; one of ulcer; and one of L. V.—some of them came on board the 9th from the sick tent. 12th. Captain Gower commands our ship, and we sailed under the command of Vice Admiral Darby, and anchored 13th at Torbay, where our people continued to enjoy fresh meat broth with vegetables daily. 16th. The Namur's and Ocean's men which came on board of us from the sick tent at Spithead, went on board

Part II. of

of their proper ships. 17th. A marine very ill complained of fever. 19th. Wine was served to the ship's company, the beer being out. 20th. The marine added the 17th died in the night of fever. The fleet sailed P M. 21st. We anchored at six P M with the fleet; and sailed again about eleven with the Cumberland, Alexander, Invincible, and Porcupine. 23d. A man was drowned by falling overboard. Some of the fever cases were exceedingly bad, and delirium very afflicting. Dysentery affected more than in any preceding or succeeding month. Could this proceed from any other cause than the general debilitated state of the ship's company by scurvy last month? A gentle emetic of ipecacuan, and a dose of rhubarb, were all the evacuations which were used.

The cure was effected by opium, bark, and a few grains of rhubarb and ipecacuan occasionally to keep the bowels open; and in slight cases by the two last with opium only.

Hence, instead of dysentery being always inflammatory, and requiring the antiphlogistic treatment, it is often a consequence of debility, which ought to be treated in a con-

trary way: as appears very obvious from my patients being thus treated and all recovering.

The thermometer was not under 60 nor above 68 until the 29th, when it was 58. The moon was full 13th, and new 29th. The atmosphere was generally cloudy. The wind was very variable from the 12th to the 19th, but chiefly Southerly. 20, 21, N; 23d. S from the 24th to 29th, W, and then NW. From the 21st it blew strong all the month. 19, 23, 24, 27, 29, T L. 15, 20, 26, 28, 30.. 17.. .

OCTOBER.

The number of patients decreased to 54, but 20 complained of fever; one of dysentery; one of costiveness; one of diarrhoea; two of scurvy; four of rheumatism; one of head-ache; one of cough; one of ear-ache; one of ophthalmia; one of blindness; one of diabetes; one of impetigo; one of scald; nine of contusion; one of strain; one of fracture; one of wound; two of inflammation; one of furuncle; and two of ulcer. Sent 7 the 21st, and 4 the 25th, to the hospital;—11 in all, viz. one of fever; two of cough; three of rheumatism; two of epilepsy;

Part II. lepsy;

lepsy; one of diabetes; and two of ulcer. On the 31st there were 22 in the list, an increase of 7. Until the 8th the wind was W, then E for a little returning suddenly to the W, and continued till the 14th, then variable, but soon fixed at S W to the 18th; it was variable, but again got to the W, and so continued until 26th, and afterwards between the N and E to the end. The atmosphere was chiefly hazy or cloudy. 3, 7, 10, 12, 13, 14, 16, 17, 18, 19, 20, 21. 6, 8.. The moon was full 13th, and new 27th.

Melasses was served to the people as part of their oatmeal. 18th. We anchored in Plymouth Sound: the weather during the cruise was exceedingly bad, blowing constantly. 1, 6, 8, 10, and 16th it blew very hard. Only the Cumberland of our little squadron could keep the sea; the rest were disabled. Several of the fleet lying in Torbay sustained some damage. 20th. We began to serve beer to the people. 26th. We sailed with the Cumberland, and joined the fleet, consisting of 23 sail of the line under the command of Vice Admiral Darby, next day.

N O V E M B E R.

The number of fever patients increased to 23; there complained besides two of dysentery; one of belly-ache; one of scurvy; two of rheumatism; two of cough; one of sore throat; one of deafness; one of nephritis; three of eruption; ten of contusion; one of strain; one of excoriation; and one of inflammation—50 in all, a decrease of 4; and at the end of the month there were only 19 in the list, a decrease of 31 which I considered as a remarkably healthy state after cruizing so long at this season.

The wind was between the E and N until the 16th, except the 13th N W. 17th. S W, and then until 22d between W and N W, and N until the 26th, then variable two days, and again easterly to the end. 1, 2, 21, and 22 it blowed strong; and a heavy gale 20th. 23d was calm; 1, 2, 3, 4, 5, 7, 8, 15, 16, 17, 18, 19, and 20. 21, and 22.. The atmosphere was generally cloudy; seldom foggy, and sometimes hazy. The thermometer was not below 50, nor above 62, though there was a fire sometimes in the ward-room.

Part II.

The

The moon was full the 12th, and changed the 26th.

8th. The beer was out, and wine was served to the ship's company. 20th. We lost company of the fleet. 21st. A fever patient fell out of his hammacoe, and lay in the lee scuppers in the wet last night, some time, before the negligent sentinels observed him. 27th. The Captain and ward-room mess bought half a chest of lemons out of a ship. 28th. We joined the fleet. I hear the Britannia's people are becoming scorbutic. 30th. The Jupiter made the signal for seeing a strange fleet. All the sick, except the man who fell out of his hammacoe and was dying, were moved down into the cable tiers,

DECEMBER.

The number of sick increased one; but the number of fever patients decreased thirteen; ten only having complained of fever; one of belly-ache; one of pain of the stomach; five of scurvy; four of rheumatism; five of headache; three of cough; five of sore throat; one of hæmorrhage; two of deafness; one of ear-ache; one of itch; three of confusion; two of strain; one of wound; three

of inflammation; one of abscess; and one of ulcer; and one accident which proved fatal 1st of January.—51 in all. And only 20 in the list at the end of the month, after having been near fifteen weeks at sea.

The wind from the 1st to the 10th was between the E and S ☉; the 11, 12, 13 V with ☾ 14, and 15 from S to S W ☾ and ☾; 16th V ☾ from the 17th to the 22d E ☉ then until the 26th from N to N E ☾. 27 S W and W until the end of the month. The atmosphere was sometimes hazy; but generally cloudy. 30, and 31 rather foggy. 2, 3, 17, 18, 30, and 31. 19, 20, 21, 22, 23, and 24, frost. The moon was full the 10th, and changed the 25th. The thermometer was between 44 and 64. The 1st the Fortitude joined the fleet, and made the signal for seeing a strange fleet. The fever patient who fell out of his hammacoe the 21st ult. died. 5th. A signal was made for a fleet in sight. 9th. The Bellona joined the fleet. 14th. I had a bad cold; a privateer was taken. 15th. We were off the Land's End. 17th. The Admiral haled down his flag and made the signal for the fleet to make, each, the best of their way to Spithead. 21st. We

Part II.

anchored

anchored at St. Helens, and on the 22d at Spit-head, after a long winter's campaign. Snow on the ground. We heard that orders were issued to take Dutch ships. 24th, Die Sabbati, we sailed in company with the Formidable, Active, and Maidstone. 25th. The Warwick joined company with us. 26th. P M the squadron agreed to share equally in prize money from the day of our sailing, until we all arrived in some English port. The agreement was confirmed by a gun being fired from each ship. 28. A violent accident happened. 31. We pressed nine men out of a privateer.

JANUARY, 1781.

The number of patients increased to 66, and those of fever more than double—21 having complained; two of belly-ache; one of diarrhœa; two of scurvy; one of rheumatism; one of head-ache; six of cough; five of sore throat; one of ear-ache; one of epilepsy; one of nephritis; one of diabetes; one of eruption; eleven of contusion; five of strain; one of excoriation; two of inflammation; and three of ulcer. The man died of the accident of the 28th ult. and 7
were

were sent to the hospital—one of scurvy; three of cough; two of rheumatism; and one of diabetes.—27 on the list at the end of the month. The wind between the 1st and 4th varied between W N W and N N E; then was S W until the 7th; from the 8th to the 17th between N W and N E; from 17th until the 22d, between S W and N W. 22d E, and afterwards N. 5, 6, 7, hazy; 8 clear; 17 and 18 frost, and the rest cloudy. 1, 2, 17, 18, 20, 21. 22. . from the 8th to the 17th frost. The moon was full the 8th, and changed the 24th. The thermometer was not under 44, nor above 58, that I observed.

2d. Wine was begun to be served to the people. 3d. One of the privateer's men complained of fever. 5th. The Warwick took in sight a large Dutch ship, the Rotterdam of 50 guns. 6th. A hundred of the prisoners with some of the officers sent on board of us; and we sent 3 midshipmen and 20 men on board of the prize. Our people were served grog. 7th. We arrived at St. Helens with the Warwick and prize. 8th. We anchored at Spithead. 14th. We sailed, and anchored the 15th A M in Plymouth Sound. 15th. Six complained of fever from irregularity. 17th. Five men whom we sent to the hospital here

March]

THE SICK LIST.

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on the 21st of October, are returned as bad as when they went. I was absent from the 11th to the 19th, 22d. The Captain has the gout. 24th, The men who came from the hospital 17th, ordered to be surveyed, and were again sent to it on the 26th.

FEBRUARY.

The sick list decreased three only, though the number of fever patients were but 13; one of erysipelas; two of dysentery; one of scurvy; two of rheumatism; thirteen of cough; two of sore throat; one of suppression of urine; one of eruption; two of scald; ten of contusion; one of strain; one of dislocation; three of wound; three of inflammation; one of abscess; and six of ulcer.—63 in all. Five were sent to the hospital, viz. one with fever; one with scurvy; two with cough; and one with ulcer. One of the lieutenants of marines was one of the patients sent for cough—33 on the list at the end of the month.

The ship returned to Spithead.

MARCH.

The number of sick increased greatly; and above triple in fever patients—41 of whom

plained; one of peripneumony; two of belly-ache; one of pain of the stomach; three of rheumatism; one of head-ache; seventeen of cough; eight of sore throat; one of consumption; two of eruption; two of scald; seven of contusion; three of strain; one of rupture; two of fracture; two of wound; six of inflammation; four of abscess; and nine of ulcer.—113 in all.

Two died—one of peripneumonia, or pleuritis; and the consumptive patient; and 8 were sent to the hospital, viz. two for fever; one for rheumatism; one for fracture; one for contusion; and three for ulcer: besides three who were surveyed; one for old scorbutic symptoms, invalided; and two with scorbutic symptoms ordered for harbour duty. At the end of the month there were 30 in the list,

13th. We sailed with 27 sail more of the line under the command of Vice Admiral Darby, and Rear Admirals Digby and Sir John Ross, Captain Gower still commanding our ship. 14th. One complained of fever who came on board with nine more from a tender, and brought fresh infection along with them. It deserves notice, that six only

Part II.

complained

complained in the preceding 13 days; and that excepting the 30th not a day escaped without one or more patients complaining of fever. The danger of taking men out of a tender without having them thoroughly cleaned and newly flopt, is very great; and ought therefore to excite universal attention on board of a ship; because there is no saying whose life may not be involved in the consequence. Melasses was served for half the oatmeal. 20th. The fleet made Cape Clear, and we cruised off and on. 21st. Wine, and the 26th grog was served to the people. Crout was served occasionally. 27th. The victualing convoy appeared and joined us from Cork. An uncommon phenomenon appeared last night in the sky. A boy swallowed a shilling without any bad consequence ensuing from it. 30. Six French prisoners were sent on board, who belonged to a privateer which the Cumberland took.

The wind from the 13th to the 18th, between N E and E. 18th and 19th, variable; until the 22d, W S W; again became variable, 22d; then E until the 25th; when it was from S to W N W; then from N E to E S E until the end, but variable. 28 and
29 it

29 it blowed strong; the weather was otherwise moderate. 28. S. 29. H. 30. The atmosphere was chiefly cloudy or hazy, and very little clear weather. The moon was new the 14th. The thermometer was not below 46, nor above 65.

A P R I L.

The number of sick decreased to 68; and the fever patients to near one third, fourteen only having complained of fever; one of belly-ache; one of scurvy; three of rheumatism; three of head-ache; one of cough; four of fore throat; seven of ear-ache; one of eruption; four of scald; eight of contusion; one of strain; one of dislocation; four of wound; four of inflammation; one of abscess; and ten of ulcer.—23 in the list at the end of the month.

9th. Wine was served to the people. 11th. A man who lay on board the Crescent lately complained of fever. 12th. A M we arrived at Gibraltar together with the St. Alban's, Courageux, and Medway, and the convoy. The Flora went up to Minorca with the convoy, and the rest of our fleet cruised in the bay and gut. As soon as we anchored, the
 Part II. enemy

April]

enemy began to fire on the town and ships.

14th. The Alexander came in and anchored, with Sir John Ross on board to superintend the landing of the provisions and stores. Our ship weighed anchor P M, and stood off and on in the bay, which we did most nights until the 20th, when we sailed with the fleet.

16th. Grog was served to the people. The gun boats annoyed us daily, and wounded men on board the frigates. The surgeon of the 58th was wounded in both legs by pieces of a shell ; the one was fractured, and the other was amputated. 20th. Seven passengers, women and children came on board of us, and numbers have gone on board of other ships, every one being beat out of the town by the enemies shot and shells, and were obliged to encamp on the hills over the South barracks. We sailed with the fleet.

The wind was from N E to N W, from thence to S W, backed to N, afterwards variable. It then got to the W, and between it and N; then E; again between W and N W, returned to the E, and was between N E and S E until the end. The atmosphere varied between cloudy and hazy, seldom clear until near the end of the month. 2, 7, 12. 17..

The

The moon was full the 8th, and changed 23d. The thermometer was never below 54, nor above 68. Nothing particular occurred.

M A Y.

Thirty-eight only complained this month, viz. eight of fever; one of belly-ache; one of pain of the stomach; one of scurvy; five of rheumatism; one of head-ache; two of hæmoptoe; one of consumption; one of deafness; one of ear-ache; one of hæmorrhoides; one of eruption; one of scald; three of contusion; two of strain; one of rupture; one of fracture; one of excoriation; three of inflammation; and two of ulcer. The consumptive patient died, and at the end of the month 14 were in the list, so that the decrease was great and general.

The wind was between S E and E until the 9th, then N, though variable until the 16th; it then got W until the 20th. then to S S E, and continued S until the 26th, and afterwards varied between the E and S W until the 31st. 5. 8. 10. 17. 4. 7.. and very bad weather. The atmosphere was cloudy or hazy. The thermometer was not

Part II.

below

below 54, nor above 64. The moon was full the 7th, and new the 23d.

The convalescent fever patients relapsed during the bad weather, and the consumptive patient, who before seemed to be recovering, died the 23d AM, suffocated with blood in a fit of coughing, the 76th day of his complaining of cough, to which he had been long subject. It rarely happens that seamen become phthifical without having been previously hurt about the thorax, which they have too long neglected. Among those who have had ship fever, more have had pulmonic affection than any other symptom; but this differs widely from either pleuritis or phthisis pulmonalis, as it is cured by cortex; and in the former, cortex is the most improper medicine, and in the latter it has never been known to succeed. By the bye, at what period is phthisis inflammatory, and when does it become asthenic?

4th. Grog was served to the people, and wine on the 8th. We got some lemons and oranges out of a Portuguese ship. I hear that the fleet in general is pretty healthy, except the Bellona, Cumberland, and Marlborough. The Bellona, I am told, has

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buried

buried 27 men since we left England, and has 108 on the sick list; that the Cumberland has buried 15 since we left England, and is very sickly. I have since learned, after she returned to England in June (besides 14 that died between England and Gibraltar), that 40 of the Marlborough's men died at the hospital. 16th. Our wine was out, and the last of the rum was served. 17th. We were supplied with a fortnight's spirits from the Britannia. We heard of the French fleet being out in detached squadrons, and having taken our St. Eustatius convoy. Rear Admiral Digby, with eight sail (of which our ship is one) of the line and two frigates, was ordered to cruise off Ushant a fortnight. The Nonsuch two days ago, when it was her lookout, had 70 men killed and wounded in an action with a French line of battle ship. Our passengers were sent on board the Royal George, going into port with the rest of the fleet; with which we parted off the Land's End. 20th. The Medway and Repulse joined us. 21. A man who lay on board the Crescent, and had the fever, relapsed a second time. The Repulse and Prudente parted from the fleet. 27 PM we chased and spoke three
 Part II. sail

fail of the line and one frigate, of Russian ships, from Lisbon. 28. I hear that the Prince George, Admiral Digby's ship's company are remarkably healthy, but they are always served either wine or beer. But no ship was more healthy than the Edgar. Great pains were taken to keep the ship and people clean and active; and temperance was enforced by punishing irregularities. One division of the people continued to air their bedding and clothes every good day; and the sick or convalescents every day regularly.

The antiphlogistic method of treating the fever prevails, as usual, in the fleet.

J U N E.

The number of sick increased greatly; especially of fever, of which 22 complained; two of scurvy; two of rheumatism; three of headache; one of cough; two of sore throat; one of epilepsy; three of ophthalmia; two of hæmorrhoides; one of scald; thirteen of contusion; three of strain; one of excoriation; one of wound; one of inflammation; one of diseased testicle; one of furuncle; one of cancered lip; and one of ulcer;—62 in all. Four were sent to the hospital; one for

X 2

fever;

fever; two for rheumatism; and one lame and convalescent fever.

There were 26 in the list at the end of the month; a considerable increase. 3d. We arrived in Plymouth Sound, after being 81 days out of port; for Gibraltar was no port to us, as we were under sail mostly all the time we were there. 7th. I went ashore on leave. 11th. Captain Gower was superseded by Captain Elliot. 12th. The ship sailed with the squadron, commanded by Admiral Darby and Sir John Ross, and consisted of ten sail of the line. Four patients with ophthalmic complaints, who have been venereals; I never met with the like circumstance before. The Queen was a very sickly ship during the cruise.

The wind in the beginning was W, and from the 12th to the 26th between the W and N; then E one day. It got back to W 27th, and afterwards was between NNE and E to the end. The atmosphere was often hazy, sometimes cloudy, and clear 27, 28, and 29. 5, 16. The moon was full the 6th, and changed the 21st. The thermometer was not below 60, nor above 66.

The irregularity of a ship's company in port, generally depends on what money and credit they have ; and the number of surgical cases always, I may say, in port depends on irregularity : and this, too, is frequently the cause of rousing dormant infection, though that is more generally brought, or excited, on board by men entering from the hospital, or other seminaries of infection ; or from men visiting on board of sickly ships, or people belonging to them visiting on board of healthy ships.

J U L Y.

Thirty-eight only complained in all ; so that the list decreased greatly ; and 12 only complained of fever ; two of pleuritis ; one of belly-ache ; one diarrhœa ; one of retching ; one of indigestion ; one of scurvy ; three of head-ache ; three of sore throat ; one of ophthalmia ; one of nephritis ; one of scald ; five of contusion ; two of strain ; one of white swelling ; one of furuncle ; and one of ulcer. Fifteen were sent to the hospital, viz. Two convalescent fever patients ; one with head-ache ; two with scurvy ; one with rheumatism ; one with cancered lip ; one with white

swelling; one with scirrhus testicle; five with ulcer; and one with L. V.—11 in the list at the end of the month.

2d. The Sultan and Magnanime passed with a convoy to the Westward. 3d. The beer was out, and half the allowance was served of wine. 7th. We arrived at Torbay; and next day got fresh beef and greens off for the people. We sailed at noon, and arrived the 9th at Spithead.—25 on the sick list; but including venereals and other slight cases to whom medicines are given, 58 is the number reported in the weekly account. 14th. Prize money was paid to our people. 19th. We sailed under the command of Vice Admiral Darby and Sir John Ross. 20th. Captain Elliot again hoisted a broad pendant, and Captain Boston was appointed to command the ship. 21st. The fleet consisted of twenty-one sail of the line. 24th. Admiral Digby with three sail of the line joined us. Melasses with four crout served to the people as usual. 26th. We saw seven sail of the line of Russian ships. 30th. The Lively retaken, and two brigs taken from the French. Two of the fever patients in the list came from the Warspite guardship in the harbour.

The wind veered from ENE to S, SSW and W, from thence to NW, and from between NE to N; and at last to W. 3 and 8. 6, 7.. T. The moon was full the 6th. and changed the 21st. The thermometer was not below 62, nor above 72. The atmosphere varied between cloudy and hazy, and sometimes was clear.

AUGUST.

The number of sick was less than in any month I was on board the Edgar; and only 7 complained of fever; one of abdominal obstruction; one of scurvy; three of headache, one of epilepsy; one of hæmoptoe; two of contusion; one of excoriation; three of wound; two of furuncle; two of ulcer; and an accident; a boy killed.—25 in all; and only 7 in the list at the end of the month.

The wind was chiefly N, though variable, and calm part of 6th and 7th, until the 9th, when it was variable until the 12th; then N until 16th; then E; the 17th W, from N to NW until 20th. E 21. S until the 25th. W until 30, and from SE to SW afterwards. 21st and 23d calm at times. 28th. It blowed

X 4

a fresh

a fresh gale. 1, 4, 5, 6, 14, 18, 19, 24, 25, 26, 27 and 30. 28.. and dews, generally in the night. The atmosphere was either hazy or cloudy, very seldom clear. The thermometer was never below 63, nor above 78, which was the afternoon of the first. 1st. Admiral Digby on board the Prince George parted company from us last night; he is going to command in America. The La Prudente joined us; she took three prizes coming out. 3d. The beer was out, and wine was served to the ship's company. 8th. A boy was killed by a fall down the main hatchway. 10th. The men were served grog. 15th. Wine was served to the people. 16th. A brig brought dispatches to the Admiral. 17th. We were informed of the combined fleet being out and spoke with. 20th. Captain Boston very ill of fever, though he does duty. 21. The Commodore struck his pendant, and went and hoisted it on board the Victory; he took one lieutenant, five midshipmen, his secretary, and servants. Twenty prisoners were sent on board of us. We learned that the combined fleet consists of 56 sail of the line, and of Admiral Parker's action with the Dutch. 25th. We arrived with the

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fleet

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THE SICK LIST.

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fleet in Torbay, and heard that the combined fleet was off Scilly. 27th. Fresh beef served to the fleet. Our people had broth every day, and ten shillings was allowed for greens every day. 28th. The bad weather forced the French in for shelter.

SEPTEMBER.

The list increased nearly double—46 having complained; viz. fourteen of fever; one of dysentery; five of belly-ache; one of indigestion; two of scurvy; one of rheumatism; one of head-ache; one of cough; one of ophthalmia; one of tooth-ache; three of eruption; seven of contusion; one of concussion of the brain; one of strain; one of fracture; two of wound; one of inflammation; and two of ulcer; and fifteen were on it at the end of the month.

There were light variable winds until the 11th; then ENE two days; W, 13th; light and variable until the 17th; then N until the 19th; then between NW and N until the 26th, when it was variable; 27th N; 28th ENE and variable with calms to the end. 24th. It blowed a fresh gale. The atmosphere was either hazy or cloudy. 4, 5, 17, 22,

22, 23, 24, 25, and 27; 11th dew; 15th T and L. The moon was full the 2d, and changed the 17th. The thermometer was not below nor above 72, unless the sun shone on it.

1st. We shifted our berth, to form a crescent with the fleet. 3d. The Agamemnon and Prothée came in. 5th. The Arrogant came in, very sickly. 6th. The Hercules came in. Began to serve beer to the men yesterday. 10th. The beer was out, and wine was served to the people. We were ordered 15 tons of beer, and three casks of four crout; but of the former we did not get twelve, and none of the latter—one ship having taken more than double the quantity ordered. This selfish and illiberal custom injures the service very materially, instead of promoting it. For some little time our decks below have not been dried as usual with fires when washed. The consequence is, the number of fever patients increases. The Commodore returned with his retinue, and hoisted his pendant again. Admiral Kempenfelt hoisted his flag on board the Victory. 11th. Victuallers came in. The men scrubbed their hammacoes last night, though the weather was very damp; and

Part II. more

more of them complained of fever. 12th. I was slightly infected last night in the sick berth. 14th. His Royal Highness the Duke of Gloucester was on board of the Admiral's ship last night. The fleet sailed A M. and anchored again P M: 15th. The fleet sailed, consisting of 27 sail of the line. If I was not misinformed, the Arrogant was ordered into port on account of sickness. 27th. Grog was served to the people, and we had no wine for the sick.

O C T O B E R.

The number of patients decreased; thirteen complained of fever; one of belly-ache; one of diarrhoea; one of scurvy; three of rheumatism; three of head-ache; one of cough; two of ophthalmia; one of nephritis; one of scald; three of contusion; three of strain; two of wound; two of furuncle; one of abscess; and one of ulcer:—in all 39, and 22 in the list at the end of the month.

The wind was variable and calm at first; and then between S E and E until 6th; then between S and W until the 14th; then N two days, when it became light and variable until the 19th; then N until the 23d; again
N and

N and calm; and then from NE to N, and Westward of N to the end. 9, 10, 14, 16, 17, and 29 H. 29 and 30 it blowed fresh gales. The atmosphere was chiefly cloudy. The moon was full the 2d, and changed the 17th. The thermometer was not below 58 until the end of the month, when it got to 49, nor above 64.

1st. Wine was served to the people. 9th. The four crout was all served. 19th. I felt rheumatic pains. We were so near the land about Cape Clear, that boats came off with potatoes and things to sell. 21st. Sir John Ross on board the Royal George, with the Foudroyant, Dublin, and Emerald, being very leaky, parted company to go into port to repair. 22d. I got some prize wine for, and began to serve it to, the sick. 24. The three divisions of the fleet separated; the Commodore had charge of the third. 25. We lost sight of the other divisions. 26. Saw the van division. 30. On my application we got 43 men out of a Cartel ship from Spain, on board of which there were thirty ill of fever. I had the recruits stript naked, well washed in a tub and pumped on; clean floss put on them, and all their
Part II. old

old clothes hove overboard; and I ordered a dose of bark for each of them.

N O V E M B E R.

The sick list increased, chiefly with fever patients, of which 29 complained;—two of pleurisy; one of belly-ache; two of scurvy; three of rheumatism; one of head-ache; one of fore-throat; one of epilepsy; one of tooth ache; one of nephritis; one of eruption; eleven of contusion; one of strain; one of excoriation; one of fistula in ano; and two of ulcer:—in all 59.—To prevent the new infection from spreading, 30 were sent to the hospital, viz. twenty-one for fever, nineteen of whom were Cartel men; another who messed with them, and one who had been ill before;—one for abdominal obstruction; three for rheumatism; one for epilepsy; one for concussion of the brain, and consequent weakness; two for contusion; and one for ulcer. At the end of the month there were 14 in the list.

The wind was W the first day, and we arrived at Spithead the second day.

Our people were paid both wages and prize money, and were very irregular.

Notwith-

Notwithstanding the care I took to prevent the Cartel men from having fever, they were so strongly infected before they came on board, that nearly one half of them were ill; and though our men were uncommonly irregular, not one was ill of fever, but the man who messed with the Cartel men, and one relapsed case, so effectually was the old infection subdued on board.

DECEMBER.

The number of patients decreased very little, 21 having complained of fever; three of pleuritis, two of whom had formerly been hurt; two of rheumatism; one of head-ache; four of cough; three of sore throat; one of eruption; one of itch; three of scald; nine of contusion; two of strain; and three of inflammation; and one accident:—54 in all. 5 were sent to the hospital and sick quarters, viz. one for fever; one for rheumatism; one for head-ache; one for cough; and one for fistula in ano.

The wind was E, then variable; N W for a short time; then between SSE and S; then variable; and returned to S; continuing between that and S W until we returned to
 Part II. then

Spithead. 8, 13 and 14. 6, 7, and 12. . The atmosphere was either cloudy or hazy; and foggy the 12th and 13th. The thermometer was not below 50, nor above 64. The moon was full the 1st, and changed the 15th. 2d. We sailed under the command of Rear Admiral Kempenfelt with eleven sail of the line, and one of fifty guns. 11th. The Ocean joined us. 12th A M a numerous fleet of French ships in sight. About noon we stretched between the enemy's ships of war, and those under their convoy, along with which were two or three line of battle ships; one of them passed close across our forefoot, and fired many shot into us, leading our squadron, without hurting a man. Several shot wounded the hull and masts, and cut our rigging. Many of the convoy struck to us as we passed them, or as they passed us; but from their not being immediately boarded and taken possession of, numbers bore up and joined their ships of war to leeward. 19 sail of the heaviest ships of France, and two *armée en flute* in the enemy's line. 14th. The *Agamemnon* and *La Prudente* were dispatched to dog the enemy's fleet, of which the former picked up five sail. The *Arethusa* was sent into port; and the

fireship to the West Indies with information of the enemy's fleet, and transports, &c. bound there. 15th. Fifty prisoners were sent on board of us. 16th. Wine was served to the people. One of the enemy's convoy was sunk on the 12th by one of our ships. 19th. One of our men fell over board and was lost. 21st. We arrived at Spithead.

JANUARY.

Twenty-four complained of fever; five of pleuritis; one of dysentery; one of cough; two of sore throat; one of epilepsy; one of nephritis; one of hæmorrhoides; one of eruption; ten of contusion; four of wound; one of fracture; one of inflammation; and two of ulcer:—55 in all; and 6 were sent to the hospital, viz. four for fever; one for rheumatism; and one for contusion. 25 in the list at the end of the month.

One man broke his left fibula, and one of the sentinels shot off his left fore-finger by the piece going off accidentally.

The ship was docked in Portsmouth harbour.

F E B R U A R Y.

The sick list decreased, particularly in fever patients; of whom only 17 complained; one of peripneumony; two of pleuritis; two of rheumatism; one of sore throat; one of eruption; two of itch; ten of contusion; six of wound; one of inflammation; two of abscess; two of scald; and three of ulcer.—50 in all. 4 were sent to the hospital: one for fever; one for rheumatism; one for cough; and one for contusion. Twelve in the list at the end of the month. I was seized with a violent rheumatic pain, from walking in a very cold night across a field.

M A R C H.

The number of patients on the whole increased, but 15 only complained of fever; one of pleuritis; two of rheumatism; one of cough; three of sore throat; one of suppression of urine; one of eruption; twelve of itch; four of scald; one of contusion; four of strain; one of fracture; four of wound;

Y

one

one of inflammation; and two of ulcer.—53 in all. Three were sent to the hospital, viz. two for cough; after fever one; and the other old; and one with fracture of the thigh. 7 in the list at the end of the month. 8th. Captain Boston left the ship, and was succeeded by Captain Moutray.

A P R I L.

The sick list increased, and the number of fever patients to 18;—three complained of pleuritis; one of pain of the stomach; one of belly-ache; two of head-ache; six of cough; two of ophthalmia; one of blindness; one of nephritis; two of hæmorrhoides; eighty of itch; fourteen of contusion; one of strain; two of wound; one of inflammation; and three of ulcer; and one accident.—139 in all. Sent 9 to the hospital, viz. one with fever; one with rheumatism; one with blindness; one with contusion; and five with ulcer. Fourteen were in the list at the end of the month.

We went out of the harbour, and sailed 13th with Admirals Barrington and Kempenfelt, and the Commodore; the squadron consisted

Part II. fisted

fitted of 12 sail of the line. 15th. The Queen and Artois joined us. 20th. We fell in with three sail of French ships of the line and two frigates, with a convoy. Le Pegase, one of the line of battle ships, was taken by the Foudroyant, and a number of the transports by the other ships. Had we been so fortunate as to have fallen in with them in the morning, instead of evening, most probably all of them would have been taken. 21st. About 50 of the prisoners were sent on board of us. 25th. The squadron arrived at St. Helens, and on the 26th at Spithead with the Pegase.

The wind was extremely variable during the short cruise. The moon changed the 12th. Part of the 16th, 17th, and 18th, the atmosphere was clear, and cloudy or hazy the rest of the cruise. 21, 22, and 25. 23 and 24.—The thermometer was not lower than 51, nor higher than 62.

M A Y.

Three complained of fever; one of rheumatism; two of scald; two of contusion; and one of ulcer:—9 in all when I left the

ship on the 7th, and there were only twelve on the list, besides a few slight lame complaints.

Three were sent to the hospital, viz. one with fever; one with cough; and one with ulcer.

C H A P. VI.

T A B L E.

The MONTHLY STATE of the SICK LIST from the 1st of July 1779, until the 7th of May 1782. The Numbers who, and of what Disease they died; the Numbers, and for what Disease sent to Hospitals; and the Event of Fever Cases sent to Hospitals.

Years	1779						1780												1781												1782																	
DISEASES	July	August	September	October	November	December	January	February	March	April	May	June	July	August	September	October	November	December	January	February	March	April	May	June	July	August	September	October	November	December	January	February	March	April	May	Number of Diseases	Deaths on Board	Sent to Hospitals	Deaths at Hospitals	Remarks								
Fever	1	5	29	59	61	36	28	30	46	49	35	40	56	34	15	20	23	10	21	13	41	14	8	22	12	7	14	13	29	21	24	17	15	18	3	869	9	58	6									
Measles				3	4	2																													9	1												
Pleurisy																					1															20	1											
Erysipelas							1													1																	2											
Dysentery		1	1					1	1	6	1				15	1	2			2							1											33										
Belly-ache		1	2	1	2	1	2		1		1			1			1	1	2		2	1	1				5	1	1				1					29										
Obstructed Viscera														1	1	1																						4										
Diarrhoea		2		1	1				1										1																				9									
Worms								1																															1									
Indigestion				1																					1		1													3								
Pain of Stomach																		1			1		1										1						4									
Vomiting															2																									3								
Æcumatism	1		1	4	8	10	5		1	5	4	2	1		2	4	2	4	1	2	3	3	5	2			1	3	3	2		2	2		1			84										
Gout			1												1																								2	1								
Scurvy		6		2	3	3			8	8	16	2	12	89	5	2	1	5	2	1		1	1	2	1	1	2	1	2										177									
Scrophula								3																																3								
Head-ache		1	1	16		1	1								1			5	1		1	3	1	3	3	3	2	3	2	1				2					52									
Giddiness		1											1																											2								
Epilepsy			1	1			2	1	1					1	4				1										1		1								16									
Apoplexy							1																																	1								
Mania					1																																			1								
Sore Throat		1		1		11	1				1				2		1	5	5	2	8	4		2	3				1	3	2	1	3					57										
Cough			3	11	1	9	2	2		1	2				5	1	2	3	6	13	17	1		1			1	1				1		6					94									
Hæmoptysis			1																				2				1													4								
Phthisis			1																	1		1																	3	2								
Hæmorrhage				1														1																						2								
Ophthalmia					2	1	2		1	1													3	1		1	2							2						17								
Blindness				1	1																													1						4								
Ear-ache							1		1								1	1	1																					13								
Deafness																		2				1																		4								
Nephritis			1	1													1		1								1	1		1				1						12								
Suppression of Urine																				1																					2							
Diabetes																																										2						
Hæmorrhoides																																										7						
Old Age						1																																				1						
Cancer																																													1			
Schirrous Testicle																																													1			

C H A P. VII.

REMARKS *on the* MONTHLY REVIEW *and*
TABLE.

TO the class of fever, the dysenteric, belly-ache, head-ache, and mostly all the cough and fore throat cases should be added, because they originated *all*, I had nearly said, from the same source; these different appearances only depending on the habits or constitutions of the subjects infected. In this view the number of fever cases would have been 1135, of whom 9 died. About 1 in 126; and of these we allow the bark to have failed in two cases only. But stating the number of cases at 869, less than one in 96 died.

Of the 56 cases sent to hospitals for fever, one was sent in July 1779, before there was any convenience on board for men; 19 were Cartel men, and one messed with them, who were sent as soon after they complained as possible, to prevent this fresh infection from spreading on board; one returned ill of

fever from the hospital, and was sent back next day; and a number in a convalescent state were sent as *weak* patients, because the ship was going next day to sea, but could not be received at the hospital until the disease on their tickets was altered from *weak* to *fever*; besides some bad *hands* who were sent, that would have been kept on board had they been good men. Subtracting all these from the fifty-eight, would leave a very small number.

Of 43 real fever cases sent to Haslar, 3 died, 1 in 14 nearly; to Plymouth only 2 were sent, none died; to Deal and Woolwich, sick quarters, 2 were sent, none died; to Gibraltar 11 were sent, 3 died; upwards of 1 in 4. Of the whole 58, about 6 died; near 1 in 9.

Respecting the pleuritic patients, under which head are comprehended peripneumonic cases, to have lost one in nine, in my own opinion; is unsuccessful practice, if they are considered simply pleuritis and peripneumonia. But as they were combined with infection and its consequences, the treatment of them became extremely difficult. The pain though acute, and dyspnoea tho' very distressing, with urgent cough, from faintness and extreme de-

bility induced by blood-letting, though cautiously conducted and repeated, were not to be relieved, and much less removed by the lancet; which in fact is the only remedy, I had almost said, necessary to cure pleuritis and peripneumonia. And though debility indicated a necessity to give the bark, the pain, dyspnœa, and cough forbid it; in some cases they were aggravated by it. These complaints seemed, especially the worst cases, to have originated from old hurts, or contusions about the thorax; and when such subjects meet with infection, the cases afford a very unfavourable prognostic.

Scurvy has ever been considered a very dangerous and fatal disease to seamen, and to all people confined within a narrow space, under the influence of bad air, and bad water, bad diet, and want of exercise, including every circumstance which tends to debilitate. And it will ever be found to attack first, fever convalescents; men debilitated, from whatever cause, the slothful and the dirty. But fatal and dangerous as it has been to other practitioners, it is a comfort to me to reflect, that I have always found means to obviate its direful effects, having never lost a patient of

scurvy, and never seen but one die of it, though I have been near thirty years in the navy. The reason of my having been so successful in this part of my practice is, that, though fatal in its consequence, it is more easily cured, if attention is paid to the sick, and if expences are not regarded, than most diseases. The treatment of my fever patients, my purchasing vegetable acid from time to time, or fruit and vegetables, and my attention to the patient's diet and cleanliness, were the means upon which my success depended. The consequence of this practice, highly beneficial to the public, has been ruinous to my own circumstances; as the expence, and a very moderate allowance for myself, have always exceeded the pay and perquisites of the ship to which I belonged; and had it not been for an indulgence on board of the R——, which nothing but the terror of a jail, which then stared me in the face, would have induced me to solicit; and for some little prize money in the late war, I should have now been in real indigence.

Why medical practice, especially in fever and scurvy, is not more successful in his Majesty's navy, I have made appear very
Part II. evidently

evidently in a pamphlet entitled "A Political View of the Indigent Establishment of the Navy Surgeons," and that it depends entirely on Government to remedy it. On the plan I have practised in the navy, surgeons may drudge on, until age renders them unserviceable, without having been able to make any provision for old age; and then superannuation and poverty, with fifty or sixty pounds a year, is all their reward and dependence. This digression I hope will be attended to by Government, to whom it is of infinite consequence; and if it is, it will be productive of more utility to mankind in general than can easily be imagined.

A disquisition on scurvy would be superfluous, after what Dr. Lind has said on it: but I must repeat one observation which I have already made on the cause of scurvy, which is, "That grog will sometimes produce scurvy when drank to excess, let the patient's circumstances and situation in other respects be ever so advantageous." I have seen several instances of this amongst gentlemen; and it effects this by destroying the digestive powers or tone of the stomach, and all manner of
appetite

appetite for food*. From these and similar observations, I consider grog as one of the principal causes of scurvy amongst seamen of the Navy. Where either good beer or good wine is served, scurvy seldom appears or becomes fatal. But when men have been at sea long, under the circumstances we have mentioned, one fit of intemperance will induce scurvy. But

The baneful effect of intemperance amongst a ship's company is more evident, in the first instance, in chirurgical cases, especially contusion, strain, fracture, wound, inflammation and ulcer, which often bring on fatal diseases. It is melancholy to reflect, that so many healthy men should become invalids, or lose their lives, merely from drunkenness. Few, very few, are wounded or hurt on real service, and rendered invalids, compared with those who are, and lose their lives, by getting drunk. Casuists may therefore refine on the subject of cruelty, in punishing seamen for drunkenness, as they please; but I am fully satisfied that it would be perfect humanity

* It also probably occasions obstructions of the mesenteric glands and liver.

and benevolence *never* to pardon a seaman for getting drunk ; but to punish every one with particular severity, to deter them from this destructive practice, and thereby prevent them from the hurts and wounds which they receive, by falling and fighting ; and the fatal consequences which too often follow, most certainly, though slowly, if not immediately. Amongst the first may be reckoned phthisis pulmonalis, or consumption, scurvy, and ruptures, and of the latter, fever with its train of evils. Setting the advantages which would redound to the service from their sobriety entirely aside, and it is obvious these would be many, it is likewise in their stupid state of drunkenness, that they are guilty of the infernal method of applying oil of vitriol to their fore shins, *as they call them*, to get invalided ; which was done in the late war, and oftener than once by some wretches. After being discharged, they made it their business, I have been told, to get their ulcers within as narrow a compass, and as soon as possible, to enter again for the large bounties—men not being rejected then for a fore shin ; and it was their study to make their ulcers soon worse, by

3

getting

getting drunk, that they might be sent to the hospital, where they again committed the same self-avenging fraud; and some in consequence of it had their legs cut off—and it may be said, perhaps, *deservedly*. But this is no satisfaction to the service, nor society, for the loss of a subject, who might have been long useful, if not valuable, had not a mistaken lenity prevented his being punished for his first drunken fit, and his ulcer from being cured. Should it idly be advanced, that punishment will not prevent many of them from getting drunk, and that it is cruel to inflict it for such a fault, I reply, that when punishment for such a crime becomes part of the invariable discipline of a ship, few of the men will be so daring as to venture to do it; and the idea of the cruelty of inflicting it vanishes, when we reflect on the good that it is to be productive of, should only half the number who do get drunk be prevented therefrom, by rigorously inflicting the punishment, especially when the ship is first put in commission.

By inflammation, in the Review and Table, is only meant external affection, where no suppuration has yet taken place.

Part II.

Respecting

Respecting the whole number sent to hospitals, it is much augmented by sending away bad *hands*, to make room to enter good men. Some expence and inconvenience to Government may arise from this ; but who would not do it that could, were they commanding ships daily on service, and liable to come to action every moment ?

C H A P. VIII.

SYMPTOMS *which were not observed on Board the*
JUNO.

THE first day some patients complained of heaviness, and a slight lethargic disposition ; of hardness and swelling, with pain of the right groin ; of soreness of the throat from inflammation, and an exudation of pus on the tonsils ; accompanied with a fetid smell to the patient, a very offensive breath, and an eruption resembling measles.

3d. An angry eruption about the mouth ; the patient, when asked to shew his tongue,
was

was unable to put it out ; but with great difficulty, from tremors, took hold of it with one hand to pull it out of his mouth downward. A relapse case.

4th. Hiccough in some cases which terminated favourably ; and in one which ended fatally with convulsive catching ; difficult expectoration of bloody and extremely viscid phlegm.

6th. Profuse hæmorrhage from the nose.

7th. The last symptom mentioned the third day ; costiveness, with yellowness of the tuniæ albuginæ oculorum.

8th. Perpetual dryness of the mouth, and a yellow suffusion over the body and eyes.

9th. Pulling out the tongue as on the 3d. Swallowing what was expectorated by cough ; and rattling in the throat.

10th. Pulling out the tongue, as mentioned on the 3d.

13th. Provoking tendency to retch, by putting the fingers of the left hand into the mouth as far as possible, and pulling the tongue, while the patient saw no person, and picking the teeth afterwards.

14th. The eyes appeared yellower sometimes than they did at others ; the cuticula

Part II.

separated

separated and peeled off; paralysis and an uncommonly large and healthy-like stool.

16th. Rigidity of the limbs.

19th. Vomiting watery stuff only, though other things were in the stomach.

20th. Expectoring extremely viscid and bloody phlegm.

It is remarkable that, virulent as the infection frequently was, no petechiæ ever appeared on any of the patients. Could this possibly be owing to any other cause than the bark having been liberally administered?

C H A P. IX.

CASES which terminated fatally.

C A S E I.

TH O. Wakeland, marine, aged about 25, of a thin habit, and inclined to drink, complained the evening of the 25th of April, 1780, of being seized with giddiness, and alternate chills and heats; lassitude and debility. Emet. statim, ac sudorific. h. f. dedi,

dedi, and allowed sage tea with nitre to drink throughout the night.

2. No remission A M, and was costive. I ordered the common purging draught, and the bark twice P M.

3. A slight remission after perspiring in the night. Cort. ʒ i. secunda quaque hora præscripsi, ac potionem ad libitum.

4. He complained of dyspnœa, pain at the præcordia, and cough at times, after a very bad night from raving; the pulse was quick and small, and the skin moderately cool.— Ut heri præscripsi. P M, slight belly-ache.

5. He raved in the night; the tongue was brownish, very foul, and rather shrivelled; the skin was cool, and the pulse smaller and quicker than natural; the countenance was much diseased, but he thought himself better. Corticem ut ʒtio cepit, et vini pauxillum in potione.

6. The cough and pain about the præcordia were more urgent, and the debility was greater A M. Ut heri præscripsi, et præcordia tinct. cantharid. illinantur. P M sal. suc. gr. v. atq; corticem ut heri adhibui.

7. A remission after moderate perspiration. Medicinas suas ut heri cepit. P M exacerba-

Part II.

tion.

tion. Sexta hora fal. fuccin. gr. ix. atq; corticem deglutiit; epithem. utitur, et clyfma injeci.

8. A remiffion, but he put out his tongue with much difficulty, as he had done for fome days paff, though it was now much cleaner. He had two copious ftools with the clyfter laft night; the pulfe and fkin were in the fame ftate as on the 4th day. Præfcripti corticem, tertia quaque hora, et vinum ut 5to die.

9. He was difturbed in his fleep with wandering; in the morning he thought himfelf better, but could not put his tongue out until his mouth was moiftened, it was fo dry and rough; the pulfe was much firmer, and the fkin was now hot and dry. Ut heri præfcripti, et fal. ammon. crud. gr. v. atq; cort.—P M a moft violent exacerbation was brought on, from wine being given him by his meffmates. He laid hold of his tongue, and pulled it out of the mouth, when he was asked to fhew it; the dyfpnœa was extreme, during which the thorax feemed to be pulled upwards and downwards with vehemence, as well as the trachæa arteria, which at the fame time was much projected at every refpiration; the

Z

coun-

countenance was dejected, the skin very hot, and quite dry; the pulse rapid, the face covered with sweat, and speechless at times. Vesicat. præcordiis, ubi epithem. cantharid. utitur, fuit admotum, et tart. emet. gr. fs. ut visum, atq; tinct. thebaic. gut. xx. 10ma hora dedi.

10. A degree of rattling in the throat last night; he had two loose stools from the tartar emetic; at eight this morning he had a remission, and complained of the blister. P M he rambled constantly. Cort. ut heri, atq; vinum ut visum dedi.

11. The pulse was firmer and more regular; in other respects he continued as yesterday. — Ut heri adhuc præscripsi. P M a severe exacerbation returned, respiration was extremely laborious; the abdomen more agitated than the thorax, and there was the same appearance about the larynx as on the 9th, the rattling more perceptible, and the lower extremities cold. Tinct. theb. gut. xx. decima hora P M.

12. He breathed with more ease, though with disagreeable noise; the countenance was hippocratic. Medic. ut heri cepit. P M uneasiness about the abdomen, and the lower ex-

Part II.

tremities

tremities continued cold; the clyster procur-
ed him one copious stool. Enem. emollien.
injeci; et tart. emet. gr. fs. dedi.

13. A M he provoked vomiting by putting
his fingers down his throat and pulling out
his tongue, when he saw no person, and he
afterwards picked his teeth:—I suspected he
had worms. 4 P M the upper extremities be-
came cold, and at eleven he died.

In this case, it cannot with justice be said
that the bark failed; for until the afternoon
of the 9th, when too much wine was im-
prudently given him, there was every ap-
pearance that he would do well. I therefore
thought, and said at the time, that he was as
much killed by the wine, as if he had been
shot; and I am still of that opinion. Ano-
ther patient got wine from his messmates at
the same time, and narrowly escaped with his
life.

C A S E II.

Isaac Kidd, seaman, aged about 58, of a
bad constitution, complained on the 17th of
May, 1780, of the general symptoms of fever,
(as I was told, for I did not see him) and took
an emetic, and the purging draught.

Z 2

2. He

2. He was exceedingly dejected when I saw him, and complained of great debility and lassitude. Cort. 3 i. quater in die, et anodyn. h. f. præscripsi.

3. He complained as before; cort. tertia quaque hora cepit.

4. I was told there was no alteration about him. Cort. ut heri fuit præscripta. P M he became worse, I was informed.

5. He was thought to be much the same. Medicin. ut heri cepit. He walked about in the afternoon, and about midnight (I learned afterwards) he became speechless and very restless. Nothing more was done for him.

6. He died at three in the morning.

Bad weather prevented me from seeing this man more than twice; and that was on the mornings of the 2d and 3d days.

C A S E III.

Edward Norman, seaman, was seized in the afternoon of the 27th of May, 1780, with the usual symptoms of fever. I ordered the emetic and purging draught together, and the sudorific at bed-time.

Part II.

2. There

2. There was a remission of the symptoms. Cort. quater in die fuit præscripta.

3. An exacerbation, I was told, came on last evening, and went off in the night. Cortex fuit ter in die præscripta. P M an exacerbation returned with rambling.

4. He passed the night ill from inquietude, rambling, head-ache, pain about the thorax, and difficult respiration. A M a remission; at 6 P M the remission continued.—His nose bled a few drops. Cort. secunda quaq; hora dedi. 8 A M vesicat. inter scap. admov.

5. I was informed that about eight last night the exacerbation returned with great dyspnœa, and rambling, and that he died about five in the morning.

I only saw this man on the 4th day of his illness. The ship was at Spithead, and bumboat women brought liquor and strong beer on board, which their messmates, especially when drunk, always give to the sick;—and as the two last cases almost certainly fell under this predicament, I think the bark had not fair play in either of them, more especially as the experiment was not made under my own observation.

C A S E IV.

James Gray, of a very easy temper, and lax fibre, being subject to hæmorrhage from the nose, complained on the 29th of May, 1780, of the usual symptoms of fever, I was told. *Emet. et sudorif. cepit.*

2. A perfect remission; the vomit purged him. *Corticem bis in die præscripsi.*

3. He continued to recover. *Cort. ter hodie fuit præscripta.*

4. His strength returned slowly. *Cort. quater dedi.*

5. He relapsed. *Corticem secunda quaque hora, et vesicat. inter scapulas præscripsi.*

6. He complained much of inquietude, heat, and thirst. *Cort. ut heri cepit.* P M a violent hæmorrhage from the left nostril reduced him to extreme weakness; calling upon him accidentally, I found about a pound of blood in the bucket. *Cort. ʒi. alum. com. gr. x. aq. simp. ʒij. fiat haust. singulis horis repetend.—et vin. cochlear. i. ut visum fumat.* The second dose of the medicine entirely stopped the hæmorrhage; *dein. alum. fuit omissum. Anod. h. f. cepit.*

Part II.

7. Debility

7. Debility and faintness with cough at times. Ut heri, sine alumine, præscripsi. P M a little hæmorrhage. Alumen ut heri cepit; ac vini cochleare ut visum.

8. Great thirst, with a dry brown tongue, distressed him; a bloody serum oozed from the nostril. Corticem et vinum ut heri dedi.

9. Extreme debility, catchings, or convulsive twitchings, an unnatural respiration, urgent cough, swallowing what he expectorated; and fordes about the mouth. Medicin. ut heri, sal. succin. et ammoniac. gr. iv. secunda quaque hora cepit.

10. About midnight a violent exacerbation came on, with dyspnœa and oppression about the præcordia. Medicin. ut heri, et vesicat. scrobic. cordis admovi. P M raving, inquietude, and the cough were distressing; when he was asked to put out his tongue, he pulled it out of the mouth, downwards; he was also costive. Enema injeci.

11. He had a stool from the clyster, and the tongue was clean, though the teeth were covered with fordes; he raved at times through the night, and was desirous to get out of bed, complaining only of weakness;

there was a convulsive motion of the lower lip, and the voice was altered. Ut heri; et P M rad. serp. virg. decoct. dedi, atque cortic. omisso vino.

12. He was worse; the pulse was quick and weaker, and his eyes were generally shut. Medicinas adhuc cepit. P M sal. succin. gr. x. quarta quaq; hora; aliter ut nona vinum præscripsi, et enema fuit repetitum.

13. Tremors increased, he became speechless at times, and coughed rather less. Cort. ʒi. sal. ammon. cr. gr. viii. secunda quaque hora, atq; vin. pauxillum ut visum præscripsi; vesic. femoribus internis admovi.

14. His appearance and symptoms varied,—A M the countenance was more lively, but the tremors, or rather universal paralysis, with raving and inquietude, continued. Ut heri, atque rad. serp. virg. decoct. P M the paralysis abated: a subsultus tendinum was observed through the day; and he voided an uncommonly large and healthy-like stool.

15. He had an exacerbation of heat, and inquietude the first part of the night, accompanied with a quick, full pulse, and towards morning a remission. At noon the paralysis returned, the countenance more diseased, and

Part II.

he

he sweated about an hour. P M the paralysis remitted: 6 A M tart. emet. gr. fs. atq; decima hora am. iterum, medicinas ut heri cepit.

16. He passed the night ill from inquietude, paralysis, and other symptoms of death. Ut heri decima hora præscripsi. P M rigidity and continual motion of the limbs, with sweat, chiefly on the forehead.

17. About midnight a profuse sweat broke out, for a short time; but he continued perspiring for several hours. A M the countenance tending to the hippocratic, and there was a constant motion of the mouth as if he had been tasting something; the paralysis was elsewhere scarcely perceptible; the skin was moderately cool and soft, and the pulse was firmer and more regular than for many days past.—P M extremely weak, and the tongue very sore, though he continued better. Medicinas quarta quaque hora, et vin. pauxillum ut visum cepit.

18. About 8 last night frequent catchings, startings, and subsultus tendinum came on; the face covered with profuse sweat, the pulse very weak and irregular, and twice he shewed a disposition to get out of bed, by putting

ting his legs and arms out ; at other times he lay on his back, with his eyes generally shut. His skin moist and soft. A M the countenance better, and eyes shut. P M he was distressed with teasing cough, and was costive. Medicinas quas 15to die 10ma hora am. præscripsi, nunc quarta quaque hora ce, it, et diætam maxime idoneam. P M enema emolliens fuit injectum.

19. Between twelve at night and four in the morning he lay quiet ; before and afterwards, he was, from inquietude, with difficulty kept in bed, and at 8 A M he died. Query—Did not this man's death proceed from the hæmorrhage on the 6th ? I have not a doubt of it, and therefore deny that the bark had a fair trial ; had information been given when it first began, it is more than probable that his life would have been saved.

C A S E V.

George Hogg, the ship's barber, much addicted to tippling, after drooping a month, principally with cough and various pains, complained on the evening of the 7th of June, 1780, of the general symptoms of fever, and cough. Emetic. et sudorific. dedi.

Part II.

2. He

2. He perceived no alteration; the symptoms were not violent.—Sal. cath. amar. ʒi. fumat, et P M corticem Peruv.

3. He complained of thirst and universal forenefs.—Cort. quater in die fumat.

4. Debility, cough, and pain about the thorax, attended with anxiety, harassed him; the skin and pulse hitherto were very little hotter or quicker than natural. Cort. quater atque tart. emet. gr $\frac{1}{4}$. cepit.

5. A remission. Ut 3tia præscripsi.

6. He continued better after a tolerable night's rest. Corticem ut heri dedi.

7. He was disturbed in the night with frightful dreams; the countenance always flushed; the pulse quick, and the skin hotter than natural, and the tongue had a boiled-like or macerated appearance. Cort. secunda quaq; hora præscripsi.

8. An exacerbation, after passing the night ill from inquietude, but he complained chiefly of perpetual dryness of his mouth.—Ut heri medicinam adhibui.

9. He complained more of thirst. Cort. atque rad. serp. virg. decoctum ut heri deglutivit.

10. He rested ill from inquietude and wandering dreams; the cheeks more flushed; he seemed very anxious, but complained of debility only. *Ut heri præscripsi.*

11. After a tolerable night there was no alteration, only that he did not take his medicine:—he was costive. *Sal. cath. am. 3fs. atque cort. ut heri sumpsit.*

12. He was restless about midnight, at other times dozed insensibly; debility was his only complaint; and that he had no appetite since he was taken ill. *Ut heri, sine sal. cath.*

13. A remission succeeded a profuse sweat, A M; there was an exacerbation P M. *Corticem adhuc cepit, et vini paux. ut visum.*

14. He perspired twice in the night, and started once out of his sleep in a fright. A remission in the morning.—*Ut heri præscripsi.*

15. He had a tolerably good night, was generally in a moderate state of perspiration, and sensibly stronger. *Corticem quarta quaque hora atq; sal. ammon. cr. gr. v. dedi:—aliter ut heri præscripsi.*

16. An exacerbation with flushed countenance, the pomegranate appearance of the
Part II. tongue,

tongue, and despondency returned, which he had all along I learned. He had no stool yesterday.—*Ut nono, atque vinum ut visum præscripsi. Enema com. fuit inject. et vesicat. inter scapulas admotum. P M a slight remission; the blister pained him, but in the evening an exacerbation returned.*

17. He slept, and perspired moderately in the night, which brought remission.—*Ut heri, unaquaque hora medicinas dedi, atque vinum. P M he complained of pain about the left ilium, which was accompanied with profuse diarrhœa, that harassed and weakened him exceedingly. Tremors on him at times. Anodyn. ut visum dedi.*

18. No heat or quickness of the pulse; on the contrary, the skin was moist, and the tremors less perceptible after a good night.—He wandered a little at times, and was so weak that he could not put his tongue out.—*Medic. ut heri, hodie; atq; vinum et opium ut visum, præscripsi. P M an exacerbation of the tremors. Hiccough at times, he again complained of the pain of the ilium, and the tongue was enlarged.*

19. He rested tolerably, and the diarrhœa, which had the bark appearance, was abated;
but

but tremors, hiccough, and subsultus tendinum were distressing. I omitted his medicines, and allowed him milk which he craved, and wine frequently. He retched at times from cough (for it continued all along, more or less), and brought up clear watery stuff. An ounce of portable soup dissolved in ten ounces of water, with half an ounce of bark and one grain of opium, were given as a clyster at ten in the morning and six in the afternoon. P M the pulse tremulous at times, but he thought himself better.

20. The hiccough frequently harassed him greatly; subinde ol. cinnam. gut. i. cum sacch. alb. frustulo cepit; he spat up sometimes a bloody and extremely viscid phlegm through the night, and had a stool; he became stronger, the pulse was firmer, and he put his tongue out. Ut heri præscripsi.—P M the hiccough, subsultus tendinum, cough, and retching at times became more fatiguing, the strength failed, and the pulse fluttered.

21. The complaints continued through the night; he never brought the milk up when he retched. Ut heri præscripsi; sed primo enema emolliens (aq. simp. ℥x. sacchar. iv. axung. ℥ij. fiat enema) injiciendum. In the forenoon

noon his face was covered with a greasy shining moisture, and the countenance became hippocratic. Universal paralysis, and at two P M he died. This is the only case wherein I allow the bark failed.

C A S E VI.

John Blair was seized the 27th of June, 1780; he complained of the general symptoms of fever, of which he was so much relieved by a vomit and sudorific, that he thought himself well, and went to his duty.

On the evening of the 2d of July, he complained again of head-ache, great pain about the præcordia, extreme depression, with a very diseased countenance, and total prostration of strength; he informed me that he had been seized the preceding evening with shivering, severe head-ache*, and the usual symptoms of fever. Statim ut 27mo ult. deinde corticem secunda quaque hora per noctem præscripsi.

2. I found hardly any alteration.—Corti-

* I predicted the patient's death as soon as I saw him.

cem adhuc cepit, atque opium ut visum. P M he had a very slight remission.

3. He was distressed with diarrhœa, griping, extreme giddiness, debility, and the countenance seemed bloated; the pulse was very moderate, and the skin cool. At 4 P M an exacerbation came on:—corticem et opium ut heri, atq; vin. ut visum præscripsi.

4. A remission of all the complaints excepting the giddiness and prostration of strength and spirits; he coughed at times, which brought on pain about the præcordia, and the tongue was brown and rough. P M an exacerbation with convulsive catching, hiccough, and dejected countenance. Medicinas, sine opio, ut heri, atque vinum libere dedi; et vesicat. præcordiis admovi.

5. Scarce any alteration, the pulse very weak and low. P M the pulse altered often in the course of the day; inordinate craving for water to drink, and to go ashore, though he seldom spoke; the skin was hot at one time, and the tunicae albugineæ were yellowish. Ut heri; ac tinct. cort. Huxham. $\bar{3}$ fs. præscripsi; it did not agree with him:—10 P M. fal. fuccin. gr. ix. cepit.

6. He was comatose, and seldom spoke,
Part II. and

and though more and more exhausted, thought himself better; the pulse seemed firmer and more regular. P M involuntary discharges of urine and fæces: the discharge from the blister was a dark-coloured sanies, and the blistered part had the same appearance; he pulled, and looked at the bed-clothes; and was very restless. *Medicin. ut heri, et sal. succin. gr. xii. 10ma. hor. P M cepit.*

7. He died at 8 A M. And

His messmate informed me that he was never well after the first attack on the 27th of June; then a severe head-ache was his chief complaint. He also told me that he had several venereal symptoms about him.

In this case the proper time, between the 27th June and 2d July, to have given the bark was lost, by his obstinately returning to duty. I therefore deny that the bark had a fair trial.

C A S E VII.

James Clark, aged about 25, had been very ill of fever from the 23d of March last to the 5th of May, when he recovered with much difficulty; and from lurking about the sick

A a

berth,

berth, drooped six days before he complained the 28th July 1780 P M of alternate chills and heats, head-ache, lumbago, and prostration of strength and spirits. Emetic. sudorific. et pediluvium præscripsi.

2. He had two stools, and perspired last night, but the chilliness and lumbago continued. Corticem secunda quaq̃ hora; et vesicator. P M inter scap. admov. præscripsi.

3. He perspired since yesterday A M, and rested tolerably last night; which brought a remission of the fever and lumbago; but the head-ache was more troublesome. No alteration P M. Corticem ut heri; et anodyn. h. f. cepit.

4. A sleep A M; and a perfect remission P M. Cort. 3j. vin. quater sumat.

5. Though his medicine was not regularly administered yesterday, he continued better. Ut heri præscripsi.

6. He was got up very early to clear the ship, which brought on exacerbation. Ut 4to die.

7. A remission after a good night. Cort. 3j. vin. ter cepit.

8, 9. Continued to recover, but was dejected. Ut heri.

10. Exacerbation particularly of head-ache, lumbago, and pain about the breast. Cort. ut 4to præscripsi, et vesicator. ut supra. P M no alteration.

11. Remission A M, and exacerbation with unusual pains P M. Ut heri, et anod. adhuc h. f. cepit.

12. No remission, and expectorated a dark-coloured pus. Ut heri.

13. Remission A M and exacerbation P M as usual. Ut heri. No expectoration.

14. Exacerbation of head-ache and lumbago with extreme debility. Ut heri.

15. Great debility and depression A M, the pulse firmer P M. Cort. 6ties. 3j. op. et vin. 3 viij.

16. He sweated profusely the first part of the night, passed the middle part very ill from inquietude; and became speechless A M. Ut heri, et vesicator. femor. intern. admov.

17. He passed the night ill from inquietude and raving; and died P M.

This is the other wherein I allow the bark failed; though his being got up so early the sixth did him hurt.

C A S E VIII.

John Goldingay, marine, aged about 27, of a strong make, but had been not many months before very ill in the West Indies, complained the 16th Sept. 1780 P M of having been seized the morning of the 15th with chilliness and universal pains, particularly of lumbago; and now he knew not what to complain of most. His spirits and strength were exhausted, and the countenance extremely diseased, being bloated and fallow, with blackness round the eyes, which were lifeless. The moment I saw him, I predicted the fatal event. Emetic. statim, et horis duabus elapsis, cort. ʒij. secunda quaq; hora repet. præscripsi; et vesicatorium inter scapul. admovendum; et pediluvio utitur.

2. The pulse, which fluttered last night, is more distinct and firm; and he vomited with the emetic, and had some stools in the night, but did not find himself relieved. Cort. ʒij. cum opii grano, ut visum, et serp. virg. decocti fortis ʒiſs. unaquaq; hora præscripsi. P M he had several stools in the day, and his tongue was enlarged and white.

Part II.

3. He

3. He passed the night ill from inquietude and universal pains, especially about the ribs; and the diarrhoea continued. But the pulse was firmer and more distinct; the skin was soft, moist, and moderately cool; and his spirits were revived. *Medicinas ut heri secunda quaq; hora præscripsi.* At noon, he complained of suppression of urine, probably from the blister, and the abdomen swelled. Spirit of nitre dulc. was added to his drink, and a blister applied to his left side; the discharge from the blister, a dark sanies. P M voided his urine, and complained of the blister on his side.

4. He was disturbed from coughing; but the diarrhoea abated; the skin was soft and moist; the tongue was clean, though still enlarged; and his spirits were good. However, the mouth was incessantly dry, and his countenance as before. The discharge from the blister was now yellow and viscid, like strong jelly. *Medicinas ut heri cepit.*

5. About midnight an exacerbation with great anxiety, despondency, dyspnœa, oppression at the scrobiculus cordis, and inquietude; with a quick irregular pulse. *Ut heri, cum sal. succin. gr. x. 6ta quaq; hora. Vesicator. later.*

altero admov. & 4ta hor. P M. Theriac.
Androm. gr. fs. cum sal. fuccin. gr. x. præ-
scripsi.

The extremities became cold P M; he wan-
dered a little, and died at 8 o'clock.

Had he complained the first day of his ill-
ness, I think, the bark would have succeeded,

C A S E IX.

Wm. Ruffel, aged about 20, drooped, and
was seized with general symptoms of fever a
week before he complained on the 11th Nov.
1780 P M. Emetic. et sudorific. præscripsi.

2. Sweated profusely through the night,
and was relieved; but his countenance is sal-
low, and a little bloated. Sal. cath. 3fs. mane,
et cort. quater in die capiat.

3. A remission after sweating profusely all
night. Cort. quater cum tart. emet. gr. $\frac{1}{4}$. ut
visum.

4. Complained only of giddiness and de-
bility, though his countenance was much
diseased. Ut heri.

5. No alteration after a restless night. Cort.
tertia quaq; hora cepit.

Part II.

6. Dysenteric

6. Dysenteric symptoms, and continued to perspire. Had very little fever, but the tongue was diseased. Cort. cum op. præscripsi.

7. Vomited his medicine at times, and seemed much diseased, though he had a tolerable night. Ut heri præscripsi.

8. Remission and perspiration on him after a pretty good night. P M exacerbation. Cort. quater cepit.

9. Remission at midnight, and perspiration on him A M. Exacerbation P M. Cort. quater cum elix. vitriol. & vin. ut visum præscripsi.

10. Remission. P M exacerbation returned slightly. Ut heri.

11. He either fell, or got out of his hammacoe, and tumbled down into the lee scuppers, where he was found quite wet and almost dead with cold, through negligence of the sentinels. A M exacerbation with flushed countenance, and tongue much diseased. Haust. cardiac. primo, dein cort. cum vin. præscripsi.

12. Great thirst; the tongue enlarged, brown and dry, and unable to put it out; and oppression about the scrobiculus cordis. Tart. emet. gr. fs. cum cort. secunda quaq; hora.

A a 4

P M

P M he complained of internal heat and thirst.

13. Great thirst, with anxiety and inquietude through the night, though he perspired. Very feeble A M, his tongue was decreased, clean and soft during the remission until 10 forenoon. Cardiac. cum cort. & vin. & vesicator. femor. intern. admov. præscripsi—a violent exacerbation having come on. He was speechless for a short time, and his face was affected with convulsive twitches and covered with cold sweat; the countenance seemed bloated; the eyes were lifeless, and the pulse was slow and weak. About noon, a slight hæmorrhage from the right nostril.

14. Diarrhœa, the pulse quicker, and stronger, and the skin preternaturally hot and moist. Complained often of pain in his feet. Ut heri medicinas cepit. P M the hæmorrhage returned.

15. A M a sleep, but no sign of recovery. The pulse irregular, quick and small; the countenance very diseased and squalid; and the colliquative diarrhœa continued. P M hæmorrhage. Ut heri præscripsi; et aluminis gr. x. bis in die sumenda.

16. No favorable appearance, tremors and other symptoms of dissolution increase. Medicinas, sine alumine, ut heri cepit.

17. Delirium and great inquietude A M after a restless night. Involuntary effusion of tears at the external canthi, with pain of his side. Laudable discharge from the blisters. Ut heri præscripti. P M exacerbation. Tart. emet. gr. $\frac{1}{6}$ cepit.

18. Remission A M. Exacerbation P M of tremors. Medicinas ut heri capiat.

19. Symptoms of death through the night. Ut heri cum rad. serp. virg. decoctet. P M he drank a pint of the ship's beer at once, which he craved much.

20. No favourable symptom. Medicinas & vinum ut supra capit.

21. He died about noon.

The accident which happened to him the night of the 10th, was certainly the cause of his death.

C H A P. X.

Of the Management of the SHIP FEVER.

S E C T I O N I.

Of Blood-letting.

WE took notice that the climate, and other circumstances under which we practised, especially on board the Juno, induced us to think it proper to let blood in a number of cases, especially when the patients first complained; but further experience, and a careful review of the Diary, convinced me, that it never was productive of good, but, on the contrary, of mischief: and having never since found in a much more extensive practice, that one patient has suffered by omitting that evacuation (for I have never let blood of a patient for ship fever on board of the Edgar), I can assert, that in a hundred cases it

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will not be necessary to let blood. It is possible a case may occur, wherein it may be proper; but we have not met with such a one among several hundreds, unless the patient was previously hurt about the thorax, which alters the case; we therefore caution young practitioners against blood-letting.

A friend of mine, who was surgeon of a seventy-four gun ship, in 1780, in a conversation on this subject, told me, that it was his practice to let blood of his patients, and that it seemed to relieve greatly; especially when they had fixed pains about the thorax. I advised him to omit bleeding some of his patients in future, and to treat them with bark; and to observe whether they did not recover sooner than those from whom he took away blood, and treated in other respects as his other patients. The next time we met, he told me that he had followed my advice, and found that the patients whom he bled became much weaker, and were recovered with greater difficulty than those who were not bled. This is a pointed testimony of an unwilling evidence against a favourite evacuation of his own, and of many others.

SECTION II.

Of Emetics.

WE already mentioned, that, if emetics are administered when the first symptoms of contagion are perceived; or during the cold or shivering fit of the first paroxysm, they frequently become a preventive of the fever, as Dr. Lind has likewise observed: but otherwise, we have rarely found them of further benefit, than to unload the stomach; and however early in the disease the patient took it, I prescribed a sudorific at bed-time, and the pediluvium generally. Indeed the emetic frequently procures several stools and perspiration; but this seldom is critical, unless at the commencement of the fever.

After what is said, we judge it unnecessary to enjoin young practitioners to vomit their patients as soon after they complain as possible; and if this happened in the evening, immediately after to give a gentle sudorific, exposing the patient as little as possible to cold, that the perspiration, if they have dependance upon it, may be kept up as long as they judge proper.

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proper. But should the patient have been ill several days before he complained, it will be, generally speaking, a loss of time to promote sweating, and idle to expect relief either from vomits or sudorifics.

The emetics which I prescribe are either the pulv. rad. ipecacuan. or tart. emet. in the manner I have already mentioned. But I would earnestly recommend administering the tartar emetic in small doses, every half hour, until it operates; lest otherwise the patients receive much hurt instead of good, by giving full doses of it. Great is the mischief which has been occasioned by giving from three to six grains, or what is called a full dose at once, —universal spasms, and extreme debility, which have proved the means of death.

If the emetic is given before noon, the remainder of the day must not be lost. Unless the patient has had a copious stool or two, I order a gentle cathartic to be given two hours after the vomiting is finished: the cathartic which I generally order is the sal cathart. amar. $\mathfrak{z}\text{i}$. with, or without, cremor. tart. $\mathfrak{z}\text{ij}$. —To save time, in many bad cases, I have given the tart. emet. and sal cath. am. together, in small quantities, repeating them until a stool was procured; and then ordered the bark.

SECTION III.

Of Sudorifics.

AT bed-time I would advise a sudorific to be administered, and the limbs to be washed with warm water, and a little vinegar. Sudorifics are very numerous; but what I have prescribed on board of the Edgar, is either of the two following—Tart.emet. gr. fs. vel gr. i. opij gr. fs. conf. ros. fiat bolus—Vel sal. C. C. gr. v. opij gr. fs. con. ros. fiat bolus; hora somni sumendus; superbibend. potione diluente, tepida, ad libitum—but sudorifics not to be repeated.

SECTION IV.

Of Blisters.

SHOULD the patient have been ailing some days before he complained, and the head-ache violent, it will be the more necessary to apply a blister between the shoulders at this time.—If it was evening before the patient complained,

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plained, I generally thought fit to give the emetic and sudorific, and to bathe the limbs. But in many cases I applied the blister immediately.

I have remarked in the Observations, that unless blisters are applied very early in Ship Fever, I could hardly say they ever proved beneficial, except in cases with fixed pains about the thorax, which they often removed without abating the fever. I am so well confirmed in the justness of the remark by longer experience, that I would strongly inculcate the application of blisters early, without regarding any theory on the action of cantharides and blistering in the beginning of fever—if they wish to apply them with good effect. I therefore repeat it, with Dr. Lind, that when applied early, they often carry off the fever entirely: but I must add, though contrary to that eminent physician's opinion, that I never perceived good effects from them, or the discharge which they procured, in the advanced state of fever, except in the cases before mentioned.

SECTION V.

Of Cathartics.

THE next, or second day of the patient's complaining, I ordered him the cathartic, unless the emetic had procured some stools; and unless bark was prescribed together with the cathartic, which was often done, I began to give it as soon as the patient had one or two loose stools, and afterwards it was continued from every one to every four hours, as I saw occasion. The sudorific was, often, again repeated at bed-time, and the blister applied as already mentioned, when the head-ache was violent.

SECTION VI.*Of Bark.*

IN some cases, I prescribed it as soon as the patient complained, without waiting for any evacuation whatever;—in others, a few hours after they were vomited only; and often along with the cathartic, according to the exigency of the cases. The more dangerous and alarming these are, the more necessary it is—experience has convinced me—

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to administer bark early. But as our chief dependence for the cure was on bark, though other medicines were frequently joined with it, we shall be more particular on this head; and at the same time endeavour to combat the principal objections which theorists advance, against the early use of bark in fever, which they found on the tonic, phlogistic and constipating qualities of the bark*. I wish however to know of physicians, whether, in a regular series of fever practice, they have discovered those qualities by its effects when early and liberally administered in fever; or if it is only a preconceived prejudice grounded on their own theory, or the theory of a favourite author or practitioner, which presents this unfavourable idea of bark. And finding it to possess those qualities, I beg to be informed for what reasons they prescribe it for intermittents, as it is universally admitted, that the system labouring under an intermittent, is nearer to a state of health than it is

* In the former edition was added, "Which, if I mistake not, may be expressed in the word mechanical;" by which I meant, that as they never affixed definitions to these terms, but have used them vaguely and indefinitely—mechanical would have been equally proper.

under any other genus or species of fever*? Because, if their own idea of bark is just, and the general opinion of intermittents be true, it is a plain philosophical induction, that so powerful a tonic and phlogistic medicine is of all others the most improper to be administered in this state of the system. When it is administered, as I have often given it, to people in perfect health, to prevent fever, what become of its tonic and phlogistic qualities? They continue to enjoy their health amidst infection. Hence it is obvious, they must either change their opinion, and find out new objections against it, or candidly acknowledge that it is the reasons before mentioned which have prejudiced them against it; prejudice which has been the bane of thousands; prejudice which has prevented us so long from getting one step beyond the line marked by our ancestors. Shall every science daily receive improvements, but that which is the most essential to man? Seeing these improvements in other sciences, and looking with amazement and sympathy on the superstition and errors of our fellow creatures in some of them, and having resolution and wisdom to

* I speak in compliance with the custom only.

think for ourselves, what can induce us to idolize them in the practice of physic only, wherein they have been so extremely deficient? Are we for ever to continue sacrificing the lives of our fellow creatures to their false doctrines, erroneous principles, and unjust prejudices? Let us regard instruction, originate whence it may; instruction dearly bought by the person who offers it with great diffidence to his fellow citizens; instruction, the fruit of a long and extensive practice, collected from innumerable instances of its salutary effects, and surely not to be rejected, because it militates against false old theories new modelled.

Of the *real* manner in which bark operates so speedily and powerfully, we are, and perhaps ever will be ignorant. But the effect of bark in fever is obviously restorative. Where one patient has died from an early and liberal use of bark in fever, certain I am that thousands have died from a contrary practice. The danger which theorists threaten us with, from an early and liberal use of bark in fever, strikes me with the same idea as if they told me, I should possibly fall, if they saw me running out

of a magazine of powder, which I knew was immediately to blow up by a train leading to it being lighted.

Let us view this important subject in another light; and for this purpose you may still retain the former idea of bark, but think proper to honor me with a consultation on the following case: "The patient, you inform me, has undergone the common evacuations, and has been blistered, but is not relieved; and that though the symptoms are not violent, you apprehend danger, as similar cases under your care have ended fatally." I am sorry you did not confer this honor sooner; but pray what are your patient's symptoms? "Various pains, especially head-ache; thirst and anxiety; the skin is dry and hot; the tongue dry and parched; pain about the thorax, especially during the exacerbation, which happens P M; and the pulse quicker and fuller than natural; and that he has been nearly in the same state for several days, only that he becomes weaker, though you strictly adhered to the antimonial and camphire treatment, and have given saline mixtures, and subacid and diluting drink to promote diaphoresis, and moderate the fever." I admit that by this

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method you may bring on perspiration, and a temporary relief; but you will as certainly hasten debility, and a train of far more dreadful symptoms than those you intend to relieve. Therefore, to mitigate the present, and to obviate the future, I prescribe bark liberally in any form that will agree best with the patient, joining occasionally any other medicine with it I think proper; taking care to avoid nauseating doses of antimonials, and allowing the patient to drink moderately of wine and water, with toast and water, and a little vegetable acid in it, if greatly desired. Should the bark disagree with him, either give a full dose of L. L. or add wine, or tinct. cort. with it, repeating them, or leaving them off, as you see proper. If it purges, join opium; and, if costive, add occasionally a few grains of rhubarb to it, or any mild purgative, or give a clyster once in twenty-four hours. Upon the supposition of its becoming necessary to promote perspiration, either give small doses of volatiles, camphire, and sal. succin. or antimonials in very small proportions during the exacerbation, repeating them, opiates being joined to either of them, as you see fit: But, I say, carefully

avoid profuse perspiration. When your patient arrives at a convalescent state, though he still has exacerbations towards night, allow him more wine, be attentive to his diet, and give him an anodyne every night, at least, until he recovers.

When we meet, you inform me, "That our patient is recovered; though you must acknowledge, that he has been treated very differently to the general practice; that you have still your doubts concerning the propriety of it; and ask me, if I would prescribe it in every species of fever?" I know not how many species you reckon of fever; but I would prescribe it, I answer, in every case not arising from actual inflammation, or topical affection—even in measles or small-pox, if they unfortunately appeared where ship infection was. In both I have done it successfully; tho' I never had an opportunity to try it in the small-pox while the ship infection raged. To prescribe bark in that state of small-pox, called secondary fever, you say "is common—but, still prepossessed with the idea of the tonic and phlogistic qualities of bark, you judge it improper in the beginning of ship fever, *or any fever.*"

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To conclude, I tell you that, the sooner it is given, the more effectual it will be, and the less will answer the purpose ;—that this is asserted not from opinion, nor the authority of any other person, but is the dearly purchased fruit of experience, very often at the risk of my own life—experimental truth, which it is not probable I will sacrifice to theoretic errors, how venerable soever their names who gave them birth, or now support them.

I have likewise added from ten to fifteen grains of pulv. cort. eleuther. to every dose of the bark ; or a decoction of rad. serp. virg. ʒij. to two ounces of bark. But when, and in what proportion, other medicines are to be joined with it, the patient's situation, and the judgment of the practitioner, must regulate. He must not, however, rest satisfied, nor imagine that he has done his duty, especially on board ship, because he has prescribed, be it ever so judiciously. He must be certain, that medicines, as well as drink and food, in a convalescent state, are duly and properly administered, and be informed when incidental symptoms occur, that, if violent, they may be immediately relieved. Should the practitioner be inattentive to his patients, he can-

not, in reason, blame his assistants if they are careless, nor the officious nurse and ignorant attendant for disobedience.

We have already forewarned practitioners against an expectation that bark will prove infallible. We must also acquaint them, that it will very seldom cure ship fever as soon as it cures fever in hot climates, not arising from virulent infection, more especially should the patients have been ill several days before they complain, for reasons hereafter to be explained. Nor are they to imagine that a few paltry half drachms will cure them, lest they add to the number who unjustly report, "That the bark failed them." What quantity, or how long it may be necessary to give it, must depend on the virulence of the infection, the climate, season, age, sex, and constitution of the patient, and other circumstances, and particularly the goodness of the bark. Consequently, in administering it, regard is to be paid only to the effects, and not to the number of doses, *nor the colour of the bark*. As in the description of the fever, though a faithful copy of nature, collected from many hundred cases, it is impossible to mark it with all the features of every case which may occur

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to the reader ; so we wish to be understood, in our directions for administering bark, which 'tis probable will succeed in most cases, that it is impossible, and would therefore be empiricism, to lay down absolute rules for all circumstances.

SECTION VII.

Of Diet.

WHEN diet becomes necessary, the most suitable that circumstances afford must be administered, often in small quantities, without regard to hours or fashion. Wine may then, very properly, be given as part of the diet. Indeed, bark is not more superior to other medicines in curing fever, I am convinced from long experience, than wine is to all other cordials. It is very often necessary to administer it throughout the fever ; and, when judiciously managed during the convalescence of the patient, it will be found the best corroborant and antiscorbutic.

The human system is so variously formed, and the circumstances under which we exist, so extremely diversified, as to render attention to *every case* necessary. Hundreds of cases, I say, which have fallen under our observation, might be related; yet the reader may never meet with one perfectly similar to either of them, or that may not require some variation in the management. Like the patients themselves, though they are all men, how widely do they differ in features, constitutions, strength, &c. ! Let the reader remember, therefore, that, after the manner of some painters, we have only drawn the outlines; the finishing of the piece must be left to their own skill and judgment; and with these, to do it with tolerable success and satisfaction to themselves, they must unite the daily efforts of the most vigilant attention.

C H A P. XI.

CASES to illustrate the Management of the FEVER.

AS the following Cases are intended to illustrate the different heads under which we have reduced the management of
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ship fever, it is not to be expected that order, as to time when they occurred, will be regarded.

SECTION I.

Of Blood-letting.

MY observations do not furnish me with a single instance of fever being cured by letting blood only. For what I have to say further on this head, I refer the reader to the first section of the last chapter.

SECTION II.

Of Vomiting.

WE have already repeatedly observed, that if vomits be administered when the first symptoms of contagion are perceived, or during the cold, or the shivering fit of the first paroxysm, they frequently prevent, and even cure the fever.

CASE

C A S E I.

Rober Dean, aged about 20 years, soon after he came from the Conquestadore guardship at the Nore, complained on the 10th of September, 1779, of shivering, sickness at stomach, head-ache, and universal pains, especially of the loins. A vomit was immediately administered, which vomited well, and procured a copious stool or two. He slept well, the symptoms were carried off, and next day he only felt himself a little weaker than usual. I gave him two doses of the bark, with fifteen drops of elixir of vitriol, and on the day following he returned to his duty, quite well.

C A S E II.

Mr. Knight, about 32 years of age, a temperate man, complained on the 19th of September, 1779, of head-ache, sickness at stomach, and thirst; the pulse was rather quicker, and the skin hotter than natural; he had not perceived any chilliness or shivering to
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precede these symptoms. I gave him an emetic, and next day he was perfectly well.

C A S E III.

Christopher Forster, aged about 19, complained on the 2d of October, 1779, of alternate chills and heats, head-ache, universal pains, and thirst. A vomit was immediately given; the 3d he found a little weakness, took the bark twice, and returned the 4th to his duty.

C A S E IV.

John Osborne, an East-India mulattoe, aged about 18, was seized the 16th of October, 1779, with all the general symptoms of fever. I prescribed the vomit immediately; the next day he was so well, that I ordered a light diet only for him; and on the 18th he returned to duty.

Many other cases might be inserted to prove the great advantage of giving vomits on the first attack of fever.

SECTION III.

Of Sudorifics.

WHEN the vomit did not carry off the symptoms entirely, the patients have been frequently cured by a sudorific.

C A S E V.

Joseph Clun, aged about 28, was seized on the 18th of October, 1779, with the general symptoms of fever; and not being entirely freed from his complaints by a vomit, which he took immediately, I ordered him a sudorific:—next day he complained of a slight debility only. He took fifteen grains of cort. eleuther. twice, and returned to his duty on the 20th.

C A S E VI.

James Thacker, aged about 23, was seized the 23d of November, with the general symptoms of fever; and for the same reason as in the preceding case, a sudorific was given at
Part II. bed-

bed-time. On the 24th, being free of the symptoms, but weak, I gave him a few doses of bark, and next day he returned to his duty.

SECTION IV.

Of Blisters.

WE might insert many cases to shew the great benefit derived from an early application of them; but as repetitions are tiresome, we shall only mention four.

C A S E VII.

Michael Irving complained on the evening of the 5th of February, 1780, of the general symptoms of fever, for which he took a vomit, and the sudorific at bed-time. There was a remission next morning, but in the afternoon an exacerbation came on with head-ach:—Matutino cath. mite cepit, et pm. vesic. cat. inter scapulas admovi.

On the 7th he was perfectly free of complaints, except from the pain of the blister,
and

and he returned to duty as soon as his back was well.

C A S E VIII.

John Putnam, aged about 37, was seized with the general symptoms of fever on the evening of the 23d of May. A vomit and sudorific were prescribed, and next day the cathartic, and at night the sudorific was repeated. On the morning of the 25th there was no remission; the head-ache, giddiness, sickness at stomach, and wandering pains, distressed him greatly. I ordered him the bark every three hours, and a blister to be applied between his shoulders. He passed the night ill from wandering and inquietude; but there was a remission of all the symptoms in the morning, and no return of them afterwards. The bark was continued, though seldom, until he returned to his duty.

C A S E IX.

James Farrel, a marine, aged about 26, complained on the 20th of June, 1780, of the usual symptoms of fever, for which he
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took the emetic and cathartic together, and the sudorific in the evening. The 21st the headache and prostration of strength and spirits continued. I applied a blister between the shoulders, and ordered him the bark. On the 22d he was free of every complaint but debility, and had no return of the symptoms.

The bark was prescribed until his back was healed.

C A S E X.

John Howe, about 25 years of age, was seized on the 27th, but did not complain until the morning of the 28th of June, 1780, of the usual symptoms of fever, and immediately took the emetic and cathartic together; and P M I ordered him the bark. On the 29th there was no remission, though he had been vomited, purged and sweated by his medicines, and the countenance was much diseased; the bark was continued four times in the day, and a blister applied between his shoulders. On the 30th he complained of the blister only, and never had any return of the fever, but took the bark twice or thrice until his back healed.

SECTION V.

Of Cathartics.

ALTHOUGH it does not occur to me that I ever saw a patient cured of fever by cathartics alone; yet I have often found it necessary to prescribe them after both the vomit and sudorifics to perfect the cure. We shall only insert two or three cases.

C A S E XI.

Mr. Mitchel, aged about 22, a strong, healthy young man, having on the 5th of October, 1779, been on duty on board the Dunkirk guardship, where the ship fever was very virulent, the day following he complained of fever; the pulse was quick, and the skin hot and dry; his head ached, and he was much harassed with griping and purging. I ordered him a vomit and diluting drinks. On the 7th he was greatly relieved, after the vomit, which operated likewise by stool and perspiration, but the dysenteric symptoms were not gone; he therefore took a cathartic, and returned on the 8th to his duty.

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C A S E XII.

Richard Sullivan, about 25 years of age, complained the 4th of November, 1779, of shivering, head-ache, and purging. An emetic was administered; and next day, as the purging was not quite gone off, he took a gentle cathartic, and returned to duty on the 6th.

C A S E XIII.

John Cummings, aged about 24, was seized on the 9th of November, 1779, with alternate chills and heats, head-ache, and universal pains. I immediately gave him the vomit, and sudorific at bed-time. The 10th, the head-ache and universal pain, though alleviated, were yet troublesome; I prescribed a cathartic, and next day he found himself perfectly well.

SECTION VI.*Of Bark.*

AS upon this we placed our chief dependence for the cure, we must necessarily be more

particular on it, than we have been on any of the former. We shall, therefore, shew how innocent and effectual it is, when given in the beginning of fever, without either an emetic or cathartic having been prescribed before, or with it, and insert a few cases, out of many hundreds, which we have successfully managed by administering bark early and liberally; and conclude with a few inferences.

C A S E XIV.

George Alexander, aged about 36, somewhat slothful, was seized on the 25th of October, 1779, with great prostration of strength and spirits—or faintness, as he expressed it. On the 26th, about 11 A M he was brought to me, immediately after he had recovered out of syncope, into which he had fallen some time before. His complaints were extreme weakness and lassitude, and confusion of the head; the countenance was greatly diseased, the pulse languid, and skin cold; a vomit was ordered, and two drachms of bark to be taken an hour after the vomiting, and to be repeated thrice in the afternoon. In the evening there was an exacerbation of heat and thirst.

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27. The fever was very moderate in the morning, and he complained but little of his head, and universal forenefs, after having had a good night. I ordered his bark to be continued.

28. He felt himself eafy, though weak, and had very little fever or thirft on him. An ounce of bark was again prefcribed, and half an allowance * of wine. He afterwards continued to take his wine, and half an ounce of bark daily, until he returned to his duty on the 1ft of November.

C A S E XV.

William Hogarth, aged about 18, bloated and of a lax fibre, on the 14th of January, 1780, was feized with head-ache at one A M which abated again, and about 10 P M he fell down on the deck in fyncope. As foon as he was recovered out of it, by the ufe of fp. C. C. he took a vomit.

15. He paffed an indifferent night, complained of great pain acrofs the os frontis; the tongue was beginning to grow black, and

* 'Tis about feven ounces by meafure.

the lips to be covered with fordes; the pulse was very quick, and the skin and muscles were exceeding hot, and preternaturally soft and relaxed. In the morning I ordered the usual cathartic, as he had no stool by the vomit. At 11 I was informed he had again fallen into syncope. Cort. ʒij. was prescribed every two hours.

16. He complained of debility and a little giddiness, and was ordered to take his bark every three hours. P M he was at his quarters during the action with the Spanish fleet, and had no return of the fever, nor took any more medicine.

C A S E XV.

Lieut. S——s, aged about 31, of a hale constitution, was seized, on the 26th of October, 1779, with heaviness, lassitude, stretching of the extremities, chilliness, and pain, with a little swelling and hardness of the right groin. I proposed a vomit, which he declined taking; and at 3 P M a severe shivering came on with head-ache, universal pains, especially lumbago. He now took a vomit; a hot fit, with an exacerbation of the symptoms,

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toms, succeeded; and at night he took five grains of sal. C. C. and half a grain of opium, in the form of a bolus.

27. He was somewhat relieved by the vomit, but more by a free perspiration through the night; the groin was much better; however, the head-ache continued, and he was costive. In the morning he took the common purge of salts and cream of tartar, and in the afternoon two drachms of the bark, twice, with a little wine and water.

28. He found himself recovered after a good night; and the bark was repeated, four times, as he had taken it yesterday. He had no relapse, and took his bark twice a-day for a few days, though he returned to his duty on the 30th.

C A S E XVII.

William Coates, about 22 years of age, of a thin habit, after drooping some days, complained, on the 5th of November, 1779, A.M. of a sore throat; he spoke through his nose, and seemed to have much difficulty in swallowing; the uvula and tonsils were much tumified, and the pulse was much quicker and

weaker than natural. The vomit was given, and in two hours after its operation, the cathartic. P M a blister was applied between his shoulders, and a sudorific given him at bed-time, after using the pediluvium.

6. He was much relieved, but costive; the cathartic was repeated in small doses, until it operated. P M he continued easier, having perspired all day. I ordered the bark to be given him twice in the night.

7. The pulse was firmer, but he complained of more pain in the left side of the throat, and the tongue was foul. Cort. 3ij. quinquies in die dedi.

8. He passed the night ill from the pain and urgent cough; the pain now extended from the thyroid gland down to the sternum, and the pulse was quick and small. P M he complained of alternate chills and heats.—Corticem ut heri præscripsi.

9. The pain remitted. P M he had very irregular or uncertain sweats and remissions through the day.—Corticem adhuc cepit, et gargarismo sæpe utitur.

10. Exacerbation of the pain of the left side, and cough. Cort. 3ij. quater sumat.

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11. Re-

11. Remission, after having passed a good night. Sal. cath. amar. $\mathfrak{z}$ $\mathfrak{ss}$. capiat:—aliter ut heri.

12. He continued better, but the cough was teasing at times. Cort. $\mathfrak{z}$ i. ter capiat. The cough did not leave him until the 20th, and during that time he took the bark twice a-day, and an emollient linctus was prescribed.

C A S E XVIII.

William Crane complained on the 8th of November, 1779, of having been seized the day before with alternate chills and heats, and fore throat; the tonsils and uvula were now much inflamed, and covered with an exudation of serum, assuming the appearance of pus; the tongue was foul, and the pulse was quick. Emetic. et cathartic. simul statim dedi; et deinde cort. $\mathfrak{z}$ i. secunda quaque hora cepit, et gargarismo utitur.

9. He perspired in the night, but the throat continued painful, and the pulse was small and quick; the tongue looked as if it had been scalded. Cort. $\mathfrak{z}$ ij. quinquies in die, et gargarismum præscripsi.

10. There

10. There was a remission of all the symptoms. Ut heri medic. quater cepit.

11. He continued better. Cort. ʒi. quarter, et sal. cath. amar. ʒ ss. matutino adhibui.

12, 13. He took his medicines, and returned to duty on the 14th.

C A S E XIX.

Barney Clare, on the 5th of November, 1779, was seized with, and complained of the general symptoms of fever. I ordered the emetic. P M a violent exacerbation came on, with very acute pain in the lower part of the left side of the thorax; the pulse was quick, hard, and full, and the skin very dry and hot. The vomit gave him several stools, and he took a sudorific at going to-bed, and used the pediluvium.

6. No remission in the morning, though he sweated profusely throughout the night; the tongue becoming black. Sal. cath. amar. ʒ ss. cort. ʒi. mane dedi; posteaque cort. ʒij. tertia quaque hora præscripsi.

7. Remission of the pain, but he complained of head-ache, sore throat, and hoarseness, which were exasperated by cough. An

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angry

angry eruption broke out about the mouth; however, the pulse was firmer, and his skin and tongue were moist.—Cort. 3ij. quinquies dedi.

8. His complaints gradually remitted, and he passed a good night. Ut heri præscripsi. P M an exacerbation came on, with acute pain of the side and cough.

9. About ten last night there was a remission, and he passed a good night; the eruption drying about the mouth. Cort. sexties in die capiat.

10. He slept well in the night, but a slight exacerbation came on. Cort. ut heri præscripsi.

The cough was urgent at times, but he had no return of the pain of his side, or of fever, and he took his bark until the 15th, when he returned to duty, gradually diminishing the number of doses as he recovered.

C A S E XX.

Mr. Boon, aged about 32, generally exposed to much fatigue, after drooping about eight days, was seized with acute pain in the left breast, which was always affected, he said,

said, when he was indisposed, and was feverer at some times than at others, with universal pains, heat and thirst, two days before he complained, on the 5th of March. A vomit was ordered, which besides operating gave him several stools; and the bark was administered in the afternoon.

6. He rested ill from the severity of pain at times through the night, and his tongue was foul. I prescribed the bark every two hours: P M an exacerbation of heat coming on with pain, he took a dose of the bark, which he told me (and spoke it with pleasure) carried both off in ten minutes after.

7. He enjoyed a good night, and had no considerable exacerbation afterwards. The bark was continued until he perfectly recovered strength on the 20th.—This patient had the fever three different times, accompanied with the pain of his breast, and always recovered by the same management.

C A S E XXI.

Jas. Morris complained on the 7th of May, 1780, of irregular chills and wandering pains; the countenance was fallow, and
Part II. bloated,

bloated, and he seemed to breathe with some difficulty.—Ipecac. gr. v. dedi, et pm. sal. cath. amar. $\mathfrak{z}$ i. et cort. $\mathfrak{z}$ ij. bis dedi. He had a fetid smell about him.

8. He passed the night ill from inquietude, head-ache, and universal pains. Cort. $\mathfrak{z}$ i. secunda quaque hora dedi, et sal. cath. amar. $\mathfrak{z}$ ss. mane.

9. The fever remitted, but he complained of the other symptoms, and of frequent cough. Ut heri præscripsi.

10. Exacerbation of pains, especially about the thorax, dyspnœa, an urgent cough, and expectorated with difficulty a viscid bloody phlegm; his breath was very fetid, his throat being much diseased; the tonsils and uvula were enlarged, and covered with a bloody sanies; and he had a disagreeable smell about him, and was always costive. Cort. ut heri atq; mann. $\mathfrak{z}$ iss.—vel sal. cath. $\mathfrak{z}$ i. et succ. lemon. recen. $\mathfrak{z}$ iv. utitur. P M the tongue began to put on the most diseased appearance I have seen so early in the fever.

11. Pain of the left side affecting respiration, with an urgent cough, and no remission in other respects.—Vesicat. lateri admovi, aliter ut heri, atque vino.

This

This man, before he recovered, had several relapses, and was at last scorbutic, before he returned quite well to his duty on the 28th of June.—He used a good deal of bark and lemon juice, and had also several blisters applied during that time: the discharge from the first was a yellow gelatinous substance.

C A S E XXII.

Mr. Dixon, aged 22, of a strong habit, and one of my assistants, drooped for two days with chilliness, foreness and fullness about the throat, a loss of appetite, and complained the evening of the 6th of July of such exquisite universal foreness, that touching any part with his finger gave him pain; great lassitude and depression; the tongue was whitish, the pulse was quicker, and skin hotter than natural. He immediately took a vomit, and a sudorific when he went to bed.

7. The fever rather increased through the night, although he had sweated profusely. A purging draught was ordered A M, and the bark to be taken P M, which he neglected. P M there was no remission; the heat, thirst, and universal pains, with profuse sweating,
Part II. ing,

ing, were distressing, and he was costive. Pediluvio utitur.

8. No remission, though he had several stools in the night; the sweating still continued, and was profuse when he moved in bed. Cort. $\mathfrak{z}$ i. secunda quaque hora, atque vini pauxillum dedi. P M he moaned, sighed, often vomited, and purged, was apprehensive of dying, but sweated less. Anod. h. f. et vesicat. inter scap. admovi.

9. He passed an indifferent night from a continuation of the symptoms. A M he craved small beer at one time, and milk at another;—there was a slight hæmorrhage from the right nostril. Cort. (roma hora am. atque alum. gr. x.) ut heri, atque opij gr. $\mathfrak{ss}$. vel gr. i. ut visum præscripsi. The discharge from the blister was a yellow serum.

11. The remission of the fever was more distinct, but he complained as usual of all the other symptoms. Cort. atque opium et vinum, ut qno præscripsi, et crem. tart. gr. xv. P M he was entirely free of fever, and a little blood, quite cold, came from the right nostril. He never had any return of the fever; however, he complained of retching, and of exacerbation of the pains for several days at times;

therefore continued his medicines on the 11th, only diminishing the number of doses gradually, and instead of opium, the last two or three days of his illness, I ordered him *sp. C. C. gut. x.* with every dose of his medicine, and more wine.

C A S E XXIII.

Mr. Blake, aged about 22 years, of a stout make, and robust constitution, was seized on the 13th of June, about noon, with a severe paroxysm of fever, which terminated in a remission about six P M by sweat. It was then he complained; the head-ache, universal pains, especially lumbago and debility, chiefly distressed him. I ordered him *cort. Peruv. p. ʒij.* immediately, and to be repeated before he went to bed.

On the 14th in the morning he was much relieved, and in the course of the day took an ounce of the bark.—The day following he returned to his duty, and never had a relapse.

C A S E XXIV.

Mr. R. aged about 38, of a healthy, tho' delicate constitution, temperate in his living, and well accustomed to different climates, without

without being affected by them, arrived at Gibraltar on the 19th of January, 1780, in perfect health; but no sooner did the wind veer round to the eastward, than he was seized with the symptoms of fever; and those were always increased when it blew a Levanter*. As long as this gentleman remained there, he was regularly affected by those winds, and constantly relieved by a liberal use of the bark, without giving any medicine previous to it: sometimes about a sixth or a fourth of a grain of emetic tartar was joined with it. He varied his diet and living as little as possible.

On the 10th of April, the wind then N W and westerly, blowing strong at noon (having for a considerable time before been much exposed to infection among the prisoners in the hospital, where his duty led him), he felt the pains coming on about eight in the evening, to which he had hitherto been subject only during the approach and continuance of the easterly winds; and expecting the change of weather, he continued doing his duty, and took a little tincture of bark twice.

* When the wind blows strong from the eastward, it blows down off the rock in flurries.

On the 11th, the pains were more severe and wandering; at one moment he had the sensation of being extremely fatigued, and the next he was so easy that he forgot them; sometimes there was an unusual heat in the skin; but the pulse was very little affected. He took the tincture of bark as he had done yesterday; went with languor about his duty, and imprudently walked and stood a good deal in the sun; and afterwards went off in a boat during the strength of the sea-breeze. He could eat little dinner from the fatigue, and passed the night indifferently, the pains being increased.

12. Finding himself worse, the pulse rather weaker than natural, and irregular, together with a slight nausea, he took tinct. cort. $\mathfrak{z}$ ss. tart. emet. gr. $\frac{1}{4}$. thrice A M. However, perceiving a chillness come on at ten A M, he began with the bark in substance. Pulv. cort. Peruv, $\mathfrak{z}$ iv. tinct. cort. $\mathfrak{z}$ ij. aq. vel infusione theæ $\mathfrak{z}$ ij. statim cepit. At 11 he was not colder, and repeated his medicine. He was so distressed with fever, severity of pains, and headache, that he lay down in bed at noon; soon after, he repeated his draught with sal. fuccin. gr. viij. and drank freely of warm tamarind beverage.

Part III.

beverage. The heat became vehement, the pulse was strong and rapid, and the pain darted violently from one place to another during the hot fit, which was succeeded by a profuse sweat, and followed gradually by a remission about four P.M. Notwithstanding the severity of the paroxysm, neither his reason nor spirits were the least affected; but he was astonished to feel himself so extremely weak, and the head so greatly diseased, though not pained when he got out of bed at four. He repeated his bark thrice, and took x. grains more of sal. succin. when he went to bed at eight o'clock, having first had a copious stool.

13. The remission continued, and became more distinct. The head seemed greatly disturbed, after he had enjoyed a tranquil and very pleasing night; and though extremely weak, he went about his duty on board, taking bark every two hours.

14. He had a good night, continued the bark, and with the first dose took an ounce of salts, and two drachms of crem. tart.—He persisted in taking bark, and never had any return of the fever while he lay at Gibraltar, but did not recover his strength until he left it on the 20th; and ever since he has en-

joyed a good state of health. At bed-time on the 12th, and on the evening of the 13th, he took ten grains of fal. succin. without any perceptible effect.

C H A P. XII.

T A B L E I.

Shews the Number of FEVER PATIENTS on board of the Edgar, between the 1st July, 1779, and the 7th May, 1782; the Number who died; and the Proportion of Deaths.

Fever Patients.	Died.
869 *	9 †
* Besides myself and others who were not on the list, and a number of prisoners.	† But it is allowed that the bark failed in two cases only, and one of these drooped a week before he complained, and had been long ill before. One died by drinking wine; two I saw only twice while they were ill. Hæmorrhage, neglected by the attendants, occasioned the death of one; one fell out of his hammock in the wet, which caused his death; and two neglected the disease, till it was too far advanced.
Proportion of Deaths. Out of 869 patients—admitting 9 died Out of 804—† admitting 2 deaths only	1 in 92 nearly. 1 in 402

† The other 7 who died, for reasons stated in the note, and the 58 sent to the hospitals, are subtracted.

Part II.

T A B L E

TABLE II.

*Shews the Number of FEVER PATIENTS admitted into Gibraltar Hospital * between the 19th of January, and the 20th April, 1780, from his Majesty's Fleet; the Number who died; and the Proportion of Deaths.*

Fever Patients admitted from the Fleet.	Died, besides those who were seized with Fever at the Hospital and died.
570	57
Proportion of Deaths.	1 in 10

TABLE III.

Shews the Number of SPANISH PRISONERS admitted into the said Hospital within that Time; the Number who died; and the Proportion of Deaths.

Prisoners admitted.	Died, besides 2 in the launches, and 2 immediately after they landed, when they went from the Hospital to Spain.
437	33
Proportion of Deaths.	1 in 13, and 8—33

* The practice in this Hospital was the antimonial and camphire treatment, until it was altered by my advice; for which the Surgeon thanked me afterwards very respectfully, and told me that he soon perceived the good effects of the bark treatment. Any inference from a comparative view of the success of the different treatments may be thought unfair, because the worst cases only are generally sent to an hospital. This is admitted; and at the same time 'tis requested of the reader to point out any other method of comparing them that is not liable to objections.

TABLE IV.

Shews the Number of FEVER PATIENTS sent from the Edgar to Haslar Hospital, between the 9th October, 1779, and the 7th May, 1782; and the Proportion of Deaths at different Periods.

Number of Fever Patients sent.	Died.
43 *	3
Proportion of Deaths.	1—14 nearly.

TABLE V.

Shews the Number of FEVER PATIENTS sent from the Edgar to Gibraltar Hospital, and the Proportion of Deaths between the 19th January and the 20th April, 1780.

Number of Fever Patients sent.	Died.
11	3
Proportion of Deaths.	1—4 and more.

Of the other four Fever Patients sent to the different Hospitals, none died.

TABLE VI.

Number of Fever Patients sent to Hospitals from 24th May, 1779, to 7th May, 1782.	Died.
58	6
Proportion of Deaths.	1—9 $\frac{1}{2}$

* Dr. John Lind made trial of many different medicines in Fever cases at this Hospital. The event, 'tis hoped, will be made known to the public in due time by that Physician.

Part II,

CON-

CONCLUSION.

IT will, no doubt, have struck the reader, that petechiæ, as before mentioned, were never observed on board the Edgar, because it is a symptom which has been considered inseparable from jail, hospital, or ship infection; and it will also have struck him, that this infection was long on board of the Edgar, and frequently renewed after being nearly destroyed. These are at least evident, from the historical facts we have stated. Is it probable then, that petechiæ not appearing could proceed from any other cause than the singular method of treatment of the Fever with Bark?

What we have further to say on this head, the reader will see in our Essay on Febrile Infection, where it will more properly appear.

(14)

NOTICE

TO THE PUBLIC

OF THE

PROCEEDINGS

OF THE

COURT

OF COMMONS

IN THE

YEAR

1841

AND

1842

AND

1843

P A R T III.

OBSERVATIONS *on* DISEASES *on board his*
Majesty's Ship ROMNEY.

I N T R O D U C T I O N.

WE shall, with as much conciseness as perspicuity will admit, lay before the reader the state of His Majesty's ship Romney's Sick List, from the 8th May to the 31st of December 1782; that he may see a further trial of the doctrine and practice recommended in the preceding Observations. And as repetitions are tiresome, we shall insert only one case, that which terminated fatally; and refer the reader to our Essay on Febrile Infection for what we have further to add on the treatment of fever.

The Romney is a fourth rate, whose complement was 367 men, and was employed on Channel service during that time.

CHAP.

C H A P. I.

MONTHLY REVIEW of the ROMNEY'S SICK LIST,
from the 8th May until the 31st of December
1782, and Meteorological Observations.

M A Y.

THE ship was docking, and most part
 of the ship's company were on leave,
 Captain Lewes superseded Captain Wickey in
 the command of the ship.

J U N E.

The number of patients were 48, viz. one
 of measles; thirty-two of influenza; one of
 rheumatism; one of ophthalmia; two of
 itch; one of strain; one of rupture; one of
 hydrocele; seven of contusion; one of
 wound; and one of abscess. Sent one with
 measles to the hospital. During the last, and
 this month, the influenza was highly epidemic
 throughout Europe, as far as I could learn.
 Various were the opinions of physicians con-
 cerning its origin or cause; some attributing
 it to infection; and others to the extremely
 Part III. variable

variable and cold wet spring, of whom I acknowledge myself to be one. That it did not proceed from infection is almost a moral certainty, as will appear obvious from what follows.

Hundreds in different ships, towns and counties, which had no communication with one another, were seized nearly as suddenly, and so nigh the same instant, as if they had been electrified. The case was the same in different kingdoms, whether situated on the continent or on islands, as far as can be learned. The companies of many of the ships were very well at bed-time, and in the morning there were not hands enough able to do the common business of the ship. No rank or station was exempted; few escaped its effects any where. To reconcile this instantaneous effect to such a cause as infection, exceeds possibility; but that, in an advanced state, it might infect people coming nigh the sick, I will not contradict, because I believe it.

The management of the influenza depended wholly on the practitioner's idea of the cause; and the success depended upon the treatment. Many considered it purely inflammatory, and
2 therefore

therefore adopted the whole antiphlogistic plan, under which vast numbers perished—either immediately, or afterwards by consumption.

The method which I recommended to the few cases which fell under my care, for they did not exceed 60 on shore and on board, was a linctus, composed of sal. am. cr. subacids, anodynes, and a very small proportion of antimonial,—food of easy digestion, and a moderate quantity of diluted wine ; or beer for the men, keeping them out of bed, and the body moderately warm.

The medicine in some cases caused retching ; and in every case it moderated the cough, kept the body soluble, and the skin moist ; and they recovered in a short time.

I took bark in substance myself as a preventive, and scarcely perceived a symptom of it ; and a person of my acquaintance told me, that he took tincture of bark every day, at the time it raged, and never felt a symptom of it. On board the Romney, two or three were let blood without my knowledge ; but none of them were let blood after that.

About this time, a child died on board of
Part III. the

July]

the measles before I knew of it, and communicated the infection to the people.

J U L Y.

72 complained in all,—viz. eighteen of fever; eight of measles; six of influenza; two of head-ache; one of rheumatism; two of ophthalmia; one of erysipelas; one of eruption; one of epilepsy; one of cough; one of scrophula; two of itch; one of strain; thirteen of contusion; one of fracture; two of wound; four of inflammation; one of abscess; four of ulcer; and two accidents.—The one was a man found lying on a chest, dead, with his head hanging over the end of it; his face downwards resting on a wadnet; the skull of the other was broke in pieces by a fall from the main yard down upon the star-board steps on the ship's side. Sent one with ulcer; five with measles; one with inflammation, topical; one with fever; and one L. V.—9 in all. There were 14 in the list at the end of the month. We sailed the 20th, Commodore Elliot on board, with his broad pendant hoisted, and commanded a small flying squadron. As we cruised in the Channel only, I have paid no regard to the weather.

I bought

I bought onions for the sick; and the Commodore sent me some lemons for them.

AUGUST.

The List decreased considerably—6 only complained of fever; one of pleuritis; four of head-ache; three of cholera morbus; two of rheumatism; one of hypochondria; one of ophthalmia; one of erysipelas; one of eruption; two of cough; one of itch; one of sore throat; one of scald; five of contusion; three of wound; one of inflammation; two of furuncle; five of abscess; and two of ulcer.—43 in all. Sent two with inflammation, and one with scrophula, to the hospital. One of the fever patients of the 7th ult. died 13th, who had been long ill, and was very ailing.—6 lame patients only in the list at the end of the month. 14th. We anchored in Plymouth Sound, sailed to Cawland Bay the 22d, and sailed from thence on the 30th.

SEPTEMBER.

The number of sick increased only one—44 having complained, viz. six of fever; two of pleuritis; two of nephritis; one of head-
Part III. ache;

ache; one of giddiness; one of belly-ache; one of rheumatism; six of ophthalmia; two of cough; one of dyspnoea; four of strain; one of rupture; one of hydrocele; ten of contusion; one of inflammation; one of furuncle; and three of ulcer. Seven were sent to sick quarters, viz. one with pleuritis; one with head-ache; one convalescent after measles; one with cough; one with hydrocele; one with lameness from old wound; and one with ulcer.—19 in the list at the end of the month; a considerable increase.

8th. We anchored at Guernsey, and heard of the Royal George being upset at Spithead. 12th. We failed, and anchored at Jersey. 16th. It blowed a strong gale. 21 Cartel men and two prisoners came on board, most of them in a shabby condition. They were washed, had clean slops and bark. 18th. We failed, and anchored at 2 P M on the 19th at St. Helens. 20th. We anchored in the Downs. 28th. We failed, and anchored at Dungeness. Query—What could occasion so many ophthalmic cases?

OCTOBER.

Nine complained of fever; one of pleuritis; one of nephritis; two of head-ache; three of belly-ache; two of scurvy; two of rheumatism; one of hypochondria; one of ear-ache; one of cough; one of scald; two of rupture; five of contusion; two of wound; one of inflammation; one of furuncle; two of abscess; and three of ulcer.—38 in all. Sent 12 to the hospital, viz. one with belly-ache; one with rheumatism; two with cough; one with scurvy; one with abdominal obstruction; one with contusion; two with rupture; and three with ulcer.—11 in the list at the end of the month.

We sailed the 1st, and anchored again in the same place the 2d. Sailed the 4th. We took a privateer, and got her people on board the 17th. Anchored in Portland Road the 19th, and arrived at Spithead the 20th, with three sick, and a few lame patients only in the list. The Diligente guardship at Spithead is very sickly; and I am informed the Flora is also very sickly in the harbour, from bringing over new raised men from Ireland. Eight of the nine fever patients were added

Part III.

at

at the end of the month, which I believe proceeded from one of our men going on board the *Diligente* the 24th on liberty. A mess-mate of his was seized the 25th, and himself on the 31st, with fever. Another instance of the bad effects of allowing the people to visit on board of sickly ships.

N O V E M B E R.

69 Patients complained; viz. twenty-seven of fever; two of pleuritis; one of parotis; three of head-ache; two of rheumatism; one of ophthalmia; one of aphthæ; one of erysipelas; two of eruption; four of cough; one of diarrhœa; two of scald; ten of contusion; one of dislocation; five of wound; three of inflammation; one of furuncle; and two of abscess.

Ten of the fever patients were sent to the hospital on the 5th, as we were to sail the next day.—13 in the list at the end of the month.

6th. We sailed, and anchored at St. Helens.

7th. We sailed, and anchored the 27th at Torbay. 30th. We sailed.

Retching was a very urgent and debilitating symptom among the fever patients; and

E e

it

it proceeded from tartar emetic having been given as the emetic without proper caution while I was on shore.

General debility was mostly complained of, and cough ; but after I forbade the tartar emetic, and ordered ipecacoan to be given as the emetic, retching was no more complained of. Neither the pulse nor tongue were much altered, though the infection was so virulent as to affect the sentinels over the sick. More of the men who were lately come on board, especially from the Lightning fire-ship, which I am told was sickly too, were seized with fever than of the old standards.

Pains about the thorax were very frequent and violent ; a few of which cases had a little blood taken away, without being relieved ; but a few who had the vena saphena opened received benefit, chiefly, perhaps, from the pediluvium being previously used ; for, in the other cases, the pediluvium was not so generally made use of as I had directed. On the 10th, one complained of parotis, most probably from the infection. Erysipelatous symptoms appeared afterwards in the same case. All the sentinels were seized with fever.

Part III.

After

After the ipecacoan vomit, I opened the body gently, and prescribed the bark immediately after, with such other medicines as I thought proper;—blistered early, and allowed them wine, and thank God they all did well.

My bark was so bad, that I was obliged to double the dose in quantity. From that circumstance, the general prejudice of practitioners against the bark would have been confirmed, and they would have condemned it as ineffectual, if not prejudicial. The pleuritic patient was treated with bark in the same manner as the fever patients, and recovered. Five of the men who belonged to the privateer, which we took the 17th ult. entered, and were all seized with fever. Two of her people who were sick, and the surgeon, were immediately sent back. Query—Did this privateer's sickly people occasion the fever on board?

DECEMBER.

Nine complained of fever; two of pleuritis; two of head-ache; one of indigestion; four of rheumatism; one of apoplexy; five of scald; one of strain; five of contusion; five of wound; two of inflammation; one of

E e 2

abscess;

abscess; and four of ulcer.—42 in all. Sent one for cough the 4th to the hospital. He was sent there the 21st Oct. for L. V. and while we were at sea, was discharged on board the *Diligente*. When he came on board, he was much in the same state as when he was sent on shore. 16 on the list at the end of the month.

We arrived at Spithead the 2d, sailed the 6th, and returned again the 20th. About the 21st, the Commodore's pendant was struck; and on the 31st I left the ship.

Captain Lewes was very attentive to the cleanliness of the ship, and of the men; and readily concurred in every thing which I proposed, either to prevent or to remove sickness. I had the sick berth frequently paid with oil of tar, which I purchased for that purpose; and I had the carlines between decks paid with it several times.

The 31st I was discharged.

T A B L E.

1782

[illegible]

[illegible]

C H A P. III.

REMARKS *on the* MONTHLY REVIEW *and*
TABLE.

I HAVE been so full in my remarks on the Review and Table representing the state of the sick on board the Edgar, that I have left nothing to add on those of the Romney. The number of contused cases on board of the latter, is a further striking proof of the weight which my argument, for the severe punishment of drunkenness, ought to have with Captains and Commanders of the Navy. If the method—severe punishment—which I recommend to prevent drunkenness, be thought cruel or tyrannical, I am ready to give it up, provided any other of equal effect is substituted in its place. But I contend, on the principles of humanity and policy, that the *vice* is productive of such alarming consequences, that the punishment proposed is in no degree adequate to its flagitiousness; and, therefore, that it even merits the attention of the civil as well as military law.

The ten fever patients were sent to the hospital, because we were going to sea next day, and upon such service, as might bring us to engage the enemy the same night: it would not, therefore, have been prudent to have kept them on board.

Six of the measles patients were sent, to prevent the infection from spreading; the other was sent on shore, in a convalescent state, for the benefit of milk diet and exercise.

As I have already observed, perhaps the class of head-ache patients, and some of those with cough, might be classed with the fever patients, as they were treated nearly after the same manner, and recovered.

Before any of the people are allowed to visit on board of a ship, at any time, but more particularly in time of war, the strictest inquiry ought to be made, by the Captains and Officers of both ships, whether or not the ships' companies are healthy. And the public service ought to render it an object of mutual concern and care, that *a man is neither sent, nor received*, from either, if there be any men ill of fever, be it ever so slight, on board.

It is equally remarkable, that no petechiæ appeared on board the Romney, though the
Part III. infection

infection was extremely virulent. I see no other way of accounting for it, but the one I have already mentioned*.

C H A P. IV.

SYMPTOMS of FEVER not observed before.

IN some cases sooner, and in others later, the eyes were so much affected, that they could not bear to look at the light.

Heat in the eyes was much complained of.

The pulse was at times slower, as well as weaker, than natural.

In some cases, the pulse was not discernibly altered from natural.

Appetite immoderate.

C H A P. V.

The CASE which terminated fatally.

JAMES MOORE, marine, aged about 25, who had lately been long ailing in Ame-

* See the conclusion of Part II.

rica, complained the 7th July of the general symptoms of fever, but more particularly of languor and debility. After the emetic and a gentle cathartic, he took the bark until the 23d, being the 17th of his illness; but it is not mentioned how often he took it. He was now ordered to take it four times a day, though he was much better. 18th. Recovering. Ut heri. 19th. He continued to recover. Ut supra. 20th. He had neither appetite nor gained strength. Ut 17mo præscripsi & ipecac. gr. v. mane—& anodyn. h. f. cepit. 21st. Much the same: He only took the ipecacoan to-day through neglect. Cort. cum elix. vit. sumat quater & anodyn. h. f. 22d. No alteration. Ut heri. 23d. His eye-sight failed him on getting up, through debility, and the pulse was smaller and quicker than natural. Cort. cum vin. cepit & vesic. inter scap. admotum fuit pm. 24th. The blister prevented his sleeping, but his pulse was firmer. Ut heri. 25th. Recovered slowly, though evidently better. Ut heri. P M Dyspnœa from immoderate eating. 26th. On recovery. Ut heri cum succ. lemon. 27th. He passed a restless night, countenance flushed, and eye lifeless. Ut 20mo præscripsi.

Part III. 28th.

28th. Remission, without vomiting. Cort. & vin. ex rad. serp. virg. decoct. ʒiſs. ſumat, & tart. emet. gr. $\frac{1}{8}$ ter, ſi viſum. 29th. He reſt-
ed ill from inquietude and ſtarting out of
ſlumbers. Ut heri. 30th. He thought him-
ſelf better; the pulse quicker than natural.
Ut heri. 31ſt. His ſleep diſturbed with idle
dreams. Ut 28vo præſcripti (ſine tart. emet.)
& columb. gr. x. quater. 32d. He always
ſaid he was better; dozed, and the counte-
nance was ſluſhed. Columb. ut heri cum vino.
33d. Motion about the mouth as if taſting
ſomething; and a ſmall contracted froth ſpit
up when he coughed. Ut heri & veſicator.
femor. intern. admov. P M pro potion. com.
(vernaculo imperial.) cum vin. utitur. 34th.
Tremors, cough, and pain in the right breaſt.
Ut 28vo, cum ſal. ſuccin. gr. x. & ſp. vol.
arom. g. xxx. quinta quaq; hora præſcripti.
35th. He thought himſelf, and rather looked,
better. Ut heri, & cort. opt. ʒi. P M cum
vin. & vol. ſumat. 36th. The mouth inceſ-
ſantly dry, the cheeks livid, and he muttered
deliriously, the tremors alſo increaſing. Ut
heri cum ſal. ſuccin. & veſicator. brachijs in-
ternis admovenda. 37th. A wild ſqualid
countenance, covered with greaſy ſweat, and

the muttering continued. Vinum solum præscripsi. 38th. He died.

Query. Did the immoderate eating cause the relapse? Were any of the thoracic or abdominal viscera particularly affected? If any, which of them? His body was kept regularly open. Had bark and wine been prescribed liberally in the beginning of his illness, would he not have recovered? I am of opinion he would; and, therefore, that the bark had not fair play, having scarcely seen him for some time after he was taken ill.

For further remarks on the treatment of Fever, I refer the reader to the preceding chapters, and to the Essay.

C H A P. VI.

Shews the Number of FEVER PATIENTS on board of the ROMNEY, between the 8th May and the 31st December, 1782; the Number and Proportion of Deaths.

Fever Patients.	Died.
75	1 *
To which might be added, with propriety, 14 headache patients, and 8 with cough.	1—75, or, more properly, 1—97

* But I do not allow that the bark failed in this case, as it was not given liberally in the beginning of the illness, nor under my own directions.

PART IV.

OBSERVATIONS *on* DISEASES *on board the*
BLENHEIM, *from January 1, to April 7,*
1783.

INTRODUCTION.

IN the same manner, without further preface, I shall lay before the reader, an epitome of our Observations on Fever on board the Blenheim, from 1st January to the 7th April, 1783; a second-rate, whose complement was 767, besides having a number of supernumeraries on board, about 800 in all. The ship was employed during that time at Spithead, St. Helens, and in the Channel.

CHAP.

C H A P. I.

MONTHLY REVIEW *of the* BLENHEIM'S SICK
LIST, *from the 1st January to the 7th April,*
1783.

J A N U A R Y.

HAVING only left the Romney yesterday, and joined the Blenheim immediately, without any preface, I proceed to lay before the reader the state of the Sick List until she was paid off on the 7th April.

113 complained of fever; 7 of pleuritis; 3 of quinsy; 1 of ophthalmia; 2 of rheumatism; 7 of cough; 2 of consumption; 2 of scurvy; 2 of asthma; 2 of eruption; 1 of deafness; 1 of hæmorrhoides; 1 of itch; 1 of scald; 1 of strain; 14 of contusion; 2 of dislocation; 2 of excoriation; 2 of inflammation; 2 of furuncle; 1 of chilblains; 3 of abscess; 12 of ulcer; and 1 of cancer:—185 in all.

19 were sent to the hospital, as we were going to sail on foreign service, viz. 11 for fever; 1 for consumption; 1 for cancer; and 6 for ulcer; and the other consumptive patient

Part IV. tient

tient died. The fever patients were only stiled so, to get them received into the hospital; they were picked bad and dirty men.

Commodore Elliot's broad pendant was hoisted on board, and the ship was commanded by Captain Lewes. The ship's complement was 767, including the Commodore and his retinue; besides about 50 supernumeraries, who were raw and green new-raised men from Ireland; and, as is ever the case with new-raised men, they were exceedingly dirty and slothful.—16th. We sailed, and anchored at St. Helens.

17th. P.M. we sailed with the Triumph, Goliath, Pegase, Cambridge, and Profelyte frigate, and Vesuvius fireship.

19th. We returned to St. Helens with the squadron, in obedience to orders sent after us by express.

FEBRUARY.

Only 35 complained of fever, a prodigious decrease; 1 of measles; 4 of ophthalmia; 2 of rheumatism; 3 of cough; 1 of asthma; 2 of eruption; 1 of belly-ache; 1 of itch; 1 of mania; 1 of scald; 7 of contusion; 2 of wound;
2 of

2 of inflammation; 2 of abscess; and 15 of ulcer:—80 in all. 5 of whom were sent to the hospital; 1 for fever; 1 for consumption; and 3 for ulcer.

6th. We failed, and anchored at Spithead.

7th. Commodore struck his flag.

28th. The marines were landed.

MARCH*.

* I am sorry part of my Journal is lost, and that I cannot proceed with the Review further than the 19th of the month, until when only 9 complained of fever; 3 of cough; 1 of asthma; 1 of ophthalmia; 1 of scald; 4 of contusion; 1 of dislocation; 1 of wound; 1 of inflammation; and 1 of ulcer.—In the beginning of the month we sailed from Portsmouth to Plymouth: 7 were sent to the hospital; 1 for consumption, and 1 for ulcer, to Haslar; 4 for fever, and 1 for fractured thigh, to the Royal Hospital at Plymouth.

C H A P. II.

STATE of His MAJESTY's Ship **BLenheim's** SICK LIST, from the 1st of January, until the 7th of April, 1783, and the Number sent to Hospitals.

DISEASES.	January	February	March	April	Numbers of Diseases	Deaths on board	Numbers sent to Hospitals.	Sent for Fever	Died of Fever at Hospitals.
Fever	113	35	9		157		16	16	
Measles		1			1				
Fleuritis	7				7				
Quinfey	3				3				
Rheumatism	2	2			4				
Scurvy	2				2				
Cough	7	3	3		13				
Asthma	2	1			4				
Consumption	2				2	1	3		
Belly-ache		1			1				
Mania		1			1				
Ophthalmia	1	4	1		6				
Deafness	1				1				
Hæmorrhoides	1				1				
Eruption	2	2			4				
Itch	1	1			2				
Scald	1	1	1		3				
Strain	1				1				
Contusion	14	7	4		25				
Dislocation	2				2				
Fracture			1		1		1		
Excoriation	2				2				
Wound		2	1		3				
Inflammation	2	2	1		5				
Furuncle	2				2				
Chilblains	1				1				
Abfcess	3	2			5				
Ulcer	12	15	1		28		10		
Cancer	1				1		1		
Monthly Number of Diseases	185	80	23		288		31*		
Deaths on board						1			
Numbers sent to Hospitals	19	5	7	1 venereal			32		
Sent for Fever	11	1	4					16	
Event of Fever Cases at Hospitals.									

* One Venereal Patient was sent the Day the Ship was paid off.

C H A P. III.

REMARKS *on the* REVIEW *and* TABLE.

REMOVING from a healthy small fourth-rate into a sickly second-rate, is a serious step to officers in general, and more particularly to a Surgeon. If the ship is ordered on foreign service, the former have time to discipline and exercise the men on the voyage, before they arrive at the place of their destination for active service; but the Surgeon is immediately involved in actual difficulties and imminent danger of his life. Such was my situation on board of the *Blenheim*. I got infected in the sick berth a few days after I went on board, and mentioned it to my first assistant at the time; but, by immediate care, was not laid up.

The supernumeraries were lately brought over in crowded tenders from Ireland; and for the reasons stated in October, 1779*, they were consequently infected, and carried the infection on board of every ship to which they were

* On board the *Edgar*.

sent. So that it will be difficult to prove that this supply, from the manner in which, and period when, it was brought over, was of the least benefit to the service. On the contrary, I think it was a national hurt; for the ships being soon after paid off, before the infection was destroyed, it was dispersed throughout the whole kingdom; and wherever fever appeared, which was almost universally in Great-Britain, it was called by every name that Surgeons, Apothecaries, or Physicians could think of, without suspecting the source, which was every where the same, and every name of fever, expressed in the Lexicon, was applied to it. What contributed greatly to this general malady was, that, though Government was at the expence of providing transports to carry these volunteers back to Ireland, when they were paid off from the ships, vast numbers of them would not go home, but chose rather to wander through the country, and carried disease with them wherever they went.

The uncommon attention which Captain Lewes, and the First Lieutenant, Mr. John Laugharne, under his direction and support, paid to the cleanliness and discipline of the
Part IV. men

men and of the ship, redounds greatly to their honour. Every thing which I proposed for the health of the men, and for stopping the progress of the infection, was immediately complied with. This attention of theirs, and the Commodore's benevolence to the sick, greatly assisted me under such an arduous task; a task which I considered as one of the most trying, either for my safety, or medical knowledge, that could have presented. That I had run a prodigious risk of the former, I have before related; and the time was come, when, upon the most urgent necessity, an obvious and fair practical proof of the veracity of my doctrine, and the success of my method of managing the sick, was required. I was now to establish it on the most solid and lasting basis, or have it sneered at for ever, and condemned as erroneous, as every former practical system, that of two or three practitioners only excepted, has been or must be; and, thank God, I succeeded, and have established it beyond the power of theory or sophistry.

Our squadron was very sickly, and buried a number of men, particularly the *Triumph*, while we lay at St. Helens.

As soon as possible after I felt myself infected, I took an emetic, and, after the operation, bark and a little wine. In the same manner my fever patients were vomited when they complained, and the bark was given them an hour after the operation; the pediluvium was used at night. Sudorifics and aperients, or other medicines, were joined along with the bark, as circumstances required; and, by the same rule, the dose and its repetition were regulated. Not one was let blood, nor debilitated by evacuations. Numbers of the fever patients were afflicted at first with catarrhus symptoms, in which cases bark was not so early administered; but they were not debilitated by evacuations more than other fever patients: on the contrary, the most powerful stimulants were prescribed. *R Cantharid. fort. gutt. v—x. ex femin. lin. infus. ʒij. bis, ter, quaterve in die, ut visum.*

The success of the practice is evident from the alteration of the Sick List in February. Constant fires in pots were kept in the sick berths, which were under each side of the forecastle; they were frequently paid with oil of tar, which was supplied from the dockyard, and the lower and middle decks were

sometimes paid with it. Vinegar is by no means to be compared with it for correcting effluvia or smell.

Every thing else, which I could think of, was put in practice to destroy the infection, and to keep the ship clean and healthy; the bedding of both healthy and sick was regularly aired.

C H A P. IV.

T A B L E.

Shews the Number of FEVER PATIENTS on board of the BLENHEIM between the 1st January and the 7th April, 1783; and the Proportion of Deaths.

Number of Fever Patients.	Died.
157	None.
Proportion of Deaths.	None died.

P A R T V.

*Practical Observations on the prevailing Diseases
in the Neighbourhood of Hythe, in Hampshire.*

INTRODUCTION.

I SHALL in this Part lay before the Reader the Observations on Fever, which I have had an opportunity to make from the 7th of April 1783, until the 30th April 1789, in a country where Fever has been considered endemial. But it may be proper first to give some idea of the country ; and in doing this, I have no intention to state parish registers respecting the increase or decrease of population, nor to draw comparisons between different places as to their being more or less healthy ; nor is the reader to expect a pastoral or flowery description of the country, as I design only to shew the general situation and appearance of it, so far as it may be sup-

posed to affect the health of the inhabitants.

During the time mentioned, I have resided chiefly at Hythe, a village bordering on the New Forest; with Hampton Water bearing from about N b W to S E b S—the Sea and Isle of Wight to the Southward. Beaulieu or Bucklershard Arm from about S W to W; and the New Forest, part of it between us and that arm, and part of it bearing almost from W to N b W round to Hampton Water; between which and Beaulieu Arm is about four miles; so that we live in an oblong nook, nearly surrounded with the sea, and salt water marshes along Hampton Water and Beaulieu Arm; and fresh water marshes in the Forest, from about S W and W N W of us, at no great distance: but between these and Hythe, close to it is high land, called Langdown, that shelters us greatly from the S W and W winds, which blow across the fresh water or forest marshes towards us. Over Langdown, the roads to Fawley, Leap, Gilbury, Beaulieu, Lymington, &c. lead; and the range of my practice in any direction from Hythe, does not exceed eleven miles in a straight line.

Part V.

South-

Southampton bears nearly N N E, distance about three miles on the opposite side of the water. At high water the tide comes close to Hythe, and runs into it at spring tides. At low water, especially during spring tides, a large tract of muddy marsh, extending the whole length of the Arm from Redbridge down to Calshot Castle, covered in many places with sea weeds and muscles, is left uncovered, and smells, at times, disagreeably, especially during Easterly winds, to which we are greatly exposed. It is chiefly forest land very marshy, and in wet weather the road to Exbury, Gilbury, and Beaulieu is difficult. Good water is scarce, especially in Hythe.

There is great variety in the face of the country round us. Numbers of hills, valleys, and champaign countries, which are covered with great variety of herbs, shrubs and trees: of the former, fern; of the middle, furze; and of the latter, oak are most abundant.—The champaign parts are chiefly to the SW. The soil in general is thin and light, covering either gravel, sand, or whitish clay; besides, in the forest marshes there is a black peat soil. In dry weather, water is scarce every where here.

The

The country is yet but thinly inhabited ; for, excepting in a very few villages, Beaulieu, Fawley, Hardley, Langly, and Dibden, two houses are seldom to be met with together. We have little connection with Lymington, Marshwood, Eling, Totten and Lyndhurst.

The nearest village to us is Dibden, about two miles higher up the Arm than Hythe, consisting of a few scattered houses and detached farms, forming a very small parish. From the parsonage, which is situated on an eminence, there is a fine prospect of Southampton, the country round it, and the Arm or water. Marshwood, lying still higher up the water, low in situation, and very wet in the winter, is a very large straggling village in the parish of Eling, about two miles higher up the water, and is parted from Totten, near the head of the water on the same side, by a small arm of the tide, whereon is a corn mill. The nearest village to us on the South is Hardley, about half way to Fawley, which, though lying high to what Hythe does, has formerly been so sickly as to give name to fever here, called the Fawley Ague, or cold chills and fever, which generally speaking is of the remittent type ;

Part V.

a real

a real ague or intermittent very seldom occurring.

Beaulieu bears S W of us, and is partly in a bottom, and partly on either ascent from the arm which runs up through it; and at low water leaves a large extent of muddy marsh on both sides. Upon this arm is Bucklershard, where line of battle ships are built for Government in a private builder's yard. At the entrance of the Arm on the N E side is Leap, a scattering village, with a fresh as well as salt water marsh, close to some of the houses. This village is about eight miles from us.

Somewhat nearer to us, near to Bucklershard Arm, is Exbury, another very scattering village surrounded with wood, chiefly oak; and in like manner is Gilbury, closely adjoining, which consists only of the Lord of the Manor Colonel Mitford's mansion; a small chapel of ease; a few detached farm-houses, and some cottages here and there. The situation of the mansion is extremely rural and pleasant in the Summer, and commands a view of Bucklershard and the Isle of Wight. The only other place deserving the name of village near us, is Langly, about five miles in land from Hythe. Close to the sea side, almost opposite to Cowes, is a build-

ing belonging to T. Luttrell, Esq. called Eagle Hurst, where Lord Cavan resides in the Summer with his family; bearing about S of Hythe, in a fine open airy situation. Cadland, the seat of Robert Drummond, Esq. about three miles and a half from Hythe, and one from Fawley, nearly half way between Hythe and Calshot Castle, with a beautiful farm and fine garden adjoining. The house stands high on a dry gravel foundation, in an extensive park, about half a mile from the nearest part of the sea at high water, and from the marsh at low water. But a great part of the marsh has been banked up from the Sea, between Cadland and Calshot Castle, and makes a very extensive rich meadow; and there are several salt works on the marsh. The park is large, and diversified with woods and lawns, without any stagnant water, excepting a clean pond, whereon is an engine to supply the house with water; and it is also supplied with spring water. The situation of Cadland is healthy and pleasant; commanding an extensive prospect. There are a number of places besides, but they are so small as not to deserve the names of villages, Hardley excepted. Every house or farm in the country, except in those villages, has a name.

Part V.

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In Hythe, notwithstanding it is so low in situation, close to a sea mud marsh at low water, I have not met with many fever cases. In Dibden I have met with infection in two houses, a pauper's and a sawyer's, as virulent as I ever observed in a ship or hospital. The pauper's whole family, consisting of himself, his wife, and six children, were infected. The oldest, a girl, died. They got the infection from their neighbour, the sawyer, whose mother and sister-in-law being ill and dying of it in Beaulieu, had it brought into his family by his wife going to see her mother and sister. The pauper's wife's mother, who lived at Marshwood, by coming to see her daughter's family, caught the fever and died. Several of the rest of the pauper's family escaped with great difficulty. All the sawyer's family were infected, except the wife. One child, who was too young to be prevailed on to take medicine, died. Of fourteen who I could learn had this fever, five died.

But this was accidental sickness, and not epidemic; for when fever occurs, and is properly managed at first, it seldom acquires such virulence any where; and the nearer the situation is to marshes or undrained swamps, the worse

worse the fever is, and the patients recover health with more difficulty.

In every part of the country, I have met with bad cases of fever. In Minstead, about two miles higher up in the forest than Lyndhurst, I visited a farmer who had been infected at the work-house by a pauper and his family, who were sent home to their own parish from a parish in Somerset very ill of fever; some of them in filthy rags, and some of them almost naked. The Overseers of the poor in Minstead, not being able to prevail on any person to look after them, were obliged to do it themselves; and my patient being one, and a humane man, was infected: as were many of the inhabitants from going out of curiosity to see them when they first came, and a considerable number died; but my patient happily recovered. The pauper died.

The diet of the lower class of people here, is neither adapted to preserve health, nor to recover it when lost. It consists of a scanty proportion of bread, potatoes, cheese and bacon, with some vegetables and a little milk in the summer. Their drink is chiefly water; sometimes they have a little small beer, but more frequently a little spirit, which grows

scarcer daily since smuggling was so well looked after. Probably fever among them, formerly, was often occasioned by the immoderate use of spirits—Last year they had a little poor cyder. Small beer would be more plenty amongst them, were it not for the high duty on malt. This class, in general, is extremely nasty in their houses, persons, and apparel; their countenances are fallow and squalid; they are addicted to indolence, and their children are indulged in paying too little regard to the sabbath; not but there are exceptions in all these respects.

Cold chills and fever, as they express themselves, are common amongst children, even those on the breast. They treat this appearance of fever with great indifference, and suffer it to continue upon them for many months. Such children always have less or more obstruction, swelling and hardness in their bowels: even some of the better sort of farmers will suffer this appearance of fever to hang about their children for many months, without calling in proper assistance; because they say there is no cure for it, and it will cure itself.

C H A P. I.

OBSERVATIONS *on* FEVER, &c. *in* 1783.

WHEN I arrived at Hythe, in the beginning of April, the small-pox were pretty general. I was informed they were at first epidemic in Southampton, and, so unfavourable were they, that several had died of inoculation. My patients, about fifty in number, all did well. I had great difficulty to save a young man, about 18 years of age, at Leap, who was infected at Southampton, where he had gone to a fair, and got drunk, I was told. I treated him from the beginning as a fever patient: it was the 1st July when he complained to me. The Summer was remarkably dry and hot; and we seldom had any rain, and but little when it did rain, with a good deal of thunder and lightning. Our harvest began the 26th July. Christmas introduced the Winter, and until then the weather was generally uncommonly fine. Green peas were picked here in the middle of November.

Fever was the most prevalent disease until the 10th August, when rain brought the wind to the N. and a sudden change of weather, from very hot to cold, immediately introduced bilious affections of the bowels, which were very general, but they were chiefly mild.

From the 23d April until the 31st December, 1783, I had 67 fever patients under my care, of whom two died about the second day after I was called in, and neither of them took bark;—they were so bad, that they scarcely took any thing. The one a woman, aged about 45, in Newtown, about three miles from Hythe; and the other a sailor, belonging to a small coasting vessel in Leap, aged about 20. He caught the fever at Portsmouth.

Thirty-four complained in the months of August, September and October, of fever, of both sexes, from the infant to old age. Five only complained in November, and none in December.

I have, in another place, given my opinion of the cause of fever being so epidemic this year.

C H A P. II.

OBSERVATIONS *on* FEVER, &c. *in* 1784.

THE winter was very severe. The frost continued, and the snow, as I was informed, lay on the ground much longer than usual in this country. The snow fell with a gale of wind from the N. E. and drifted exceedingly. The spring was rather cold and backward; but the summer was pleasant, and the hay harvest fine. About the 18th August, rain set in, after which there was scarce one dry day during the month. September was dry and pleasant until the 19th, when it rained, and there were showers for three days after; but, upon the whole, the weather was fine until the 8th December, when a good deal of snow fell, and on the 9th. It also snowed the 11th, 16th, 17th, 18th, and 21st. The wind between N. and N. E. brought the snow, and it got to the Southward of E. about the 27th. It was a very cold month.

This year I had only 43 fever patients, of whom four died. One a young man, aged
 Part V. about

about 22 years, in February, at Stone near Leap, who was ill three weeks before I saw him. He took a good deal of bark, but was too late in beginning with it. A boy at Beaulieu in March, who was ill some time before I saw him, and did then not take medicines regularly. One V. aged about 34, at Gilbury, was speechless, in a violent paroxysm, when I was called in; but in a short time had a perfect remission from the medicine which I saw administered; and though I gave the most particular directions to repeat it during the remission, it was neglected; so that the favourable opportunity to recover him was lost, and he died the next paroxysm. The other was a woman, whom I only saw twice in the end of December. She died in the beginning of January, 1785, and had been four or five days ill before I saw her; she was aged, and much debilitated: she took very little nourishment or medicine.

Belly-ache and bowel complaints in the autumn were extremely epidemic, and fatal in many places. Enteritis appeared about the end of September, and continued to rage with violence until after the frost set in some time.

But, fortunately, no patient which I attended died. The antiphlogistic plan was rigidly followed. Several patients were let blood fourteen times before they recovered: they were always relieved during the operation. The semicupium also relieved immediately in every case in which it was used. After repeated evacuations, opiates were beneficial. One patient was recovered beyond expectation by extr. hyoscyam. gr. i—ij. repeated every six hours. The purgatives which I made use of were chiefly ol. ricin. manna and neutral salts. Blood taken from them during the hard frost, and placed in a cold room, without fire, never assumed the inflammatory crust or buff, though it flowed in a stream from the patient.

Fever, as I believe it ever has done, and will do in all ages, assumed appearances according to the constitution of, and circumstances about, the patients; accompanied with acute rheumatic pains in some cases, which an unwary practitioner might have taken for pleuritis or caufus. In other cases it was attended with bilious or icteric symptoms; and in others there were obvious marks of great debility about the patients: but in all of them

Part V.

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the bark, joined with aperients when necessary, performed the cure. In June and October 15 of the 43 fever patients complained, and none in December.

C H A P. III.

OBSERVATIONS *on* FEVER, &c. *in* 1785.

THIS was the longest winter I remember, and it was severe. A great deal of snow fell, and it lay on the ground much longer than usual in this country, I am told. The spring was very cold and backward, the frost continuing until the beginning of April, and then white frost almost every morning of the month, and frequently in May. Until the 9th June, the thermometer was not higher than 53. June was dry, a few days in the beginning of the month excepted, when light showers fell. But we had very little rain until the middle of July, after which we had rain ten days successively; and it continued wet, and was very cold the greatest part of August; notwithstanding which, many got in their

harvest before the end of the month. The beginning of September was also very cold and wet. The end of October and beginning of November were rainy, and frost set in the 7th, which continued ten days; and rain again in the end of the month. The wet weather continued until 21st December, when frost again set in, and snow fell the 25th.

After so long and severe a winter, so cold and backward a spring, and such a wet unseasonable summer, that it was a very sickly year is not to be wondered at, March, July, October, and November were particularly so; thirty-eight of the sixty fever patients which were under my care this year, having complained in those months. Seven of the 60 died, besides the elderly woman who complained last December, already made mention of. Two of the seven died in March; one of them an old and very infirm blind man, worn out by repeated attacks of fever from improper living, at New-Farm, near to Leap. The other a child in Fawley; in whose case I foretold the fatal event at first seeing it. The former was too late in beginning to take medicine, and the latter would not take any.

One died in September at Leap, who obstinately refused taking medicine :—her husband was ill at the same time, and recovered with much difficulty ; both were very obstinate, and were too long ill before they sent for me.

Two children in October, at Dibden, of infection, as already observed ; they took very little medicine.—One woman in November, who lived close to a large marsh, and was ill long before I saw her : indeed her case was rather chronic than fever.—And a young woman in Beaulieu parish, in December, with putrid sore throat. She was ill five days before I was called in. The bark had no trial in those cases.

The fever began with, and continued throughout the year ; and, I was informed, was very fatal in many places ; but I did not find, in many very bad cases, that it resisted my usual method of treatment, where I was called in early, and the patients followed directions. Most of those were accompanied with bilious obstructions or suffusion and icteric symptoms ; consequently aperients were joined with bark.

In many convalescent cases of fever, I have observed that, after the fever and its concomitant symptoms were entirely carried off, great acceleration of the pulse and restless nights have again returned, while the loss of appetite, and anxiety, continued; all of which were only effects of great debility, and disappeared as the patients regained strength, with the assistance of frequent change of apparel and air, nourishing diet, wine, anodynes, moderate exercise and amusement.

Enteritis appeared so early as July, was extremely epidemic, and fatal in several instances in the country, and in Southampton, as I was informed; though, fortunately, I did not lose a patient. Numbers who had it last year, suffered greatly from it this year; but the same method of treatment which succeeded before, was equally successful now.—It deserves notice, that enteritis was never known to be epidemic here before last year, as I was informed.

I had two patients, boys, bitten by mad dogs*. One boy, aged about 13 years, on

* One of the dogs died mad: the other dog, which was bit by the mad dog, was shot after signs of madness appeared about him.

the 10th April, had both his legs *rather torn than* bitten by the dog, which died mad, after having bitten numbers of dogs and hogs, which died, or were destroyed. I did not see him before the 13th April; until then he had been dressed (by his mistress, a respectable farmer's wife) with poultices made of oatmeal and grounds of beer. He was now sent home to his father's at Fawley. The lacerated wounds in both legs (fifteen large and small) were very foul, black, and almost painless, though the legs were also much swelled.

I dressed them twice a-day with Barton's Ormskirk medicine regularly 22 days, one afternoon excepted; and once every day after, until he was well, excepting one day. June 1st, he was so well, that I did not dress him afterwards.

On the 13th, 17th, 21st, 29th, and 30th April, I gave him a dose of Barton's Ormskirk medicine. It was repeated the 30th, because he wasted part of his dose the day before. On the 30th, P M, he had a stool from his medicine, which was the only time that it had any obvious effect, unless profuse sweating of his feet (which was observed by his mother in

law during the cure) could be attributed to it. On the 13th April, the pulse was 86, and gradually diminished to its natural standard. The wounds looked obviously better after every dose of the medicine which he took.

On the 17th, the wounds in the right leg (four in number) were bloody and inflamed, A M, after being disposed to bleed the preceding day from the slightest touch.

• The 22d, I observed he drivelled; but his mother in law said he commonly did; but never had observed his feet to sweat before. No other occurrence happened worthy notice during the cure.

He lived with me from 1st June to the 11th October, as a servant, and never shewed any symptoms of illness.

The other boy, aged about 10, was bit the 31st May, by a large dog, which fought with the mad dog, and was shot, after shewing signs of madness. The boy and his brother, as they went to school, were accustomed to play with the dog which bit him, and he never had been surly to them before. He was bit in his right arm. I found a small wound in the anterior part of the fore-arm, and a slight scratch on the anterior part of the
Part V. arm,

arm, above the joint, which seemed both to have been made at one bite. The arm, especially about the joint, was inflamed when I first saw him on the 2d June; he complained of great pain, especially about the tendinous expansion of the biceps, and said he had passed a very restless night from the pain. He had a smart fever on him; and told me that as he went to school after he was bit, a person, to whom he shewed the bite, officiously poured something on the wounds *to take the anguish out, as they pretended*, which I afterwards learned was ol. terebinth.

I dressed his arm with, and immediately gave him a dose of, Hill and Berry's Ormfirk medicine, A M, which he immediately vomited, the pulse then beating 98. I therefore repeated the dose in the afternoon, though the fever still continued. The 3d June, I found him easy, and that a little suppuration had taken place, after a much better night. He had still a little fever.

4th. He was free of fever, and the swelling and hardness were much less.

5th. I gave him a full dose of Hill's medicine again, and no unfavourable symptom ever appeared after; and on the 6th he went to school

school in spite of his mother's directions, and never had any complaint afterwards.

FIRST REMARK.

I shall leave it to the reader to make his own observations on these cases, which merit his attention, because they were both cured by medicines, which, though apparently of exactly the same nature, are the property of rivals at great variance with each other; and, were I called to decide on the merit of both, I could not possibly give a preference to either, their effects appearing to me to be so perfectly similar. Provided, therefore, that the medicine which is given be often enough repeated, it is of no consequence which of them it is, in my opinion; but the repetition of it ought to depend on the judgment of a Physician or Surgeon; for the case must be extremely slight indeed, wherein I would depend upon one dose.

SECOND REMARK.

If I had a patient bit about the trunk of the body, or head, I would see the medicine repeated every day, until there were obvious symptoms of recovery, and I would admini-

Part V.

ster

ster the first dose as early after the accident as possible.

THIRD REMARK.

The preceding cases merit the reader's serious attention for another important reason, viz. "Popular opinion or confidence in this " or any other medicine, could not possibly " have any influence on either of my young " patients," whatever it might have on the parents, or on me who prescribed it.

I am well informed, that a very eminent surgeon imputes *the supposed efficacy of the Ormskirk medicine to credulity or popular opinion*; and has declared as his opinion, *that the Ormskirk medicine never was of any service in a case of canine madness*, i. e. That it never performed a cure upon a patient who had been infected with canine virus, or the poison of a mad-dog; and as such an imputation and declaration may lead to important consequences, I shall, without any intention to dispute with him, offer some remarks, and leave it to the reader to decide.

As there are unfortunately facts beyond the power of man to demonstrate, so there
are

are falsehoods or false opinions beyond the reach of demonstration to confute. So that, whichever of those propositions one chooses to adopt, he can set demonstration at defiance. Such is the opinion of this eminent man.

His *imputation* is, I trust, clearly refuted to the reader's satisfaction in the third remark. Faith in a medicine may sometimes do wonders, and even cure the patient; but so powerful an exercise of the mind as to produce such an effect on a boy of thirteen, I believe never was known, and much less on one of ten.

If having given the Ormskirk medicine successfully in the only two cases which ever came under my care—to two boys, on whose minds popular credulity or faith in any medicine, I presume, could have no influence—be to him no proof of the efficacy of the medicine; his having given it unsuccessfully to several patients does not prove to me its want of efficacy; because, were his cases fairly stated, I might possibly have great reason to disapprove of his management. Having, perhaps, neither given the medicine early enough after the accidents, nor in sufficient

Part V. doses;

doses; nor repeated it often enough; nor treated the wound properly to render the medicine effectual; and his want of success affords grounds for such a suspicion.

The field for argument on this, like most other subjects, not reducible to demonstration, is boundless; and, although I have no inclination to dispute, I cannot silently let the opinion of so great a man pass unnoticed, when, very contrary, I am persuaded, to his intention, it would otherwise clash with the interest of mankind. In order, therefore, to elucidate the subject, let us try what assistance analogy will lend us, and this we look for in the small-pox.

1st. The benefit derived to mankind from inoculation, is universally allowed: But is this benefit derived merely from the incision, and the insertion of the variolous matter?

2d. Is it not derived from the use of proper means to render the disease mild and benign?

3d. For a certain time after inoculation, who can prove immediately that the patient is infected?

4th. Because no positive proof can for a
2 certain

certain time be adduced that the patient is infected, are the means to render the disease mild and benign to be neglected?

5th. Therefore, when we know that a wound is made with a poisoned instrument, whether lancet or tooth, would it be wise or proper to delay in the one case longer than in the other, to use every method in our power, particularly the most approved by experience, to render the disease mild and benign; seeing the latter is invariably fatal when the patient is infected, and the disease is left to itself until it arrives at a certain state, as in canine madness?

6th. In the practice of inoculation then, if we expect any advantage from it, are we not to use all the means in our power, as soon as inoculation has taken place, and often long before it, to guard against the destruction which the disease made in the natural way; and are not the same precautions to be used with a patient bit by a mad dog?

7th. In the natural small-pox, and in fever too, if proper means have been neglected before, or at, the commencement of the disease, is not the loss irretrievable, and the conse-

Part V.

quence

quence often fatal. Is it, therefore, unreasonable to expect the same to happen after the bite of a mad dog?

Besides, the proprietors of the Ormskirk medicine very properly recommend it to be given as soon after the accident happens as possible; though they adduce cases wherein it was successful after symptoms of madness came on, a number of days after the accident.

In a word, as there are just grounds to suspect that infection has taken place after the bite of a mad dog, as well as after inoculation; as the effects of both may be rendered innocent by the use of proper means timely administered; as the Ormskirk medicine is the most approved for the bite of a mad dog of any medicine we know; and as the success thereof chiefly depends on administering it early after the accident; there is no opinion which, I think, would justify me in delaying a moment longer than I could possibly help to administer it.

I will, therefore, only remark further, that I cannot foresee any good purpose that the declaration of this eminent Surgeon's opinion could answer; but I fear that, very contrary

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to

to his intention, I believe, it might have done great mischief, had it been suffered to pass unnoticed. So many unfortunate people having been bit by mad dogs, and done well from taking the Ormskirk medicine, has so deservedly placed it high in the public faith as a cure for canine madness, that any attempt to destroy this faith, without communicating a substitute more to be depended upon than this Ormskirk medicine, is, in my humble opinion, neither philosophical nor justifiable.

C H A P IV.

OBSERVATIONS *on* FEVER *in* 1786.

MY intention to go to sea on board the Salisbury, obliged me to leave home, and my business, several times before I failed, June 18th, for Newfoundland, by which means I had but twelve fever patients before that period. A woman, one of last December's fever patients, rather past middle age, who had been ill of enteritis in the autumns of 1784 and 85, and frequently seized with
Part V. slight

slight attacks in her stomach and bowels between those periods, died in January. Unfortunately she became negligent of herself whenever she arrived at a convalescent state. Another woman died in March, the day after I was called in. I immediately foretold her death, and she took no medicine.

After my return from Newfoundland in November, I had two more fever patients this year. I was then informed, that bowel and bilious complaints had been common in the autumn and fall, though they had neither been so general nor violent, even among those who had been afflicted with them both the preceding years, as they were in 1784 and 85.

C H A P. V.

OBSERVATIONS *on* FEVER *in* 1787.

FOR the reasons mentioned in the preceding chapter, I had but twelve fever patients before the middle of June, when I sailed on board the Salisbury again for New-

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foundland, and only one more after we returned, the 18th November, until the end of the year. Most of those eleven cases were very bad, and they had been so a considerable time before I was called in. On my return I was informed, that bowel complaints had been frequent in the autumn, especially among those who had been afflicted with them the three preceding years.

C H A P. VI.

OBSERVATIONS *on* FEVER, &c. 1788, and continued until the 30th April, 1789.

UNTIL the end of June, when I failed again on board the Salisbury for Newfoundland, I had only ten fever patients, four of whom were very bad; one of them a lady, who had been ill nine weeks before, under another Physician's care, and relapsed the first day she went out to take an airing, and I was called in the next day. Both attacks of her illness commenced with violent pain and obstruction in her bowels. She soon recovered.

Part V.

After

After the 9th November, when we returned, until the end of the year, I had only three more fever patients, who recovered in a short time.

In the month of January, 1789, I had six fever patients, five of whom were very ill, and one of them died, a woman, who I have been since informed lived intemperately. She was ill upwards of forty-eight hours before I saw her, and she died the seventh day of her illness. I only saw her three times, though she lived in Fawley. Her senses were unusually acute.

In February I had ten patients, one of whom, an elderly man, died the 8th of his fever; but he had been ailing several days before. I did not see him until the 4th day, and but twice afterwards, though he lived in Newtown. At first he was over anxious to get well, and afterwards despaired unreasonably. His eyes seemed most diseased.

In March I had but two patients, both old people; and in April only six, of which one died the fifth of his illness, and I did not see him until the beginning of the fourth day, when I immediately predicted his death.

C H A P. VII.

OBSERVATIONS *on the* TREATMENT *of* FEVER
PATIENTS *on Shore.*

EXcepting in those cases accompanied with bowel complaints, bilious symptoms, or rheumatic pains, wherein purging medicines were joined with the bark, I never deviated from my usual method of treatment; and in one case, accompanied with profound coma, in which I gave musk frequently in substance, as a stimulant, in doses of ten grains, besides the julep—ineffectually.

C H A P. VIII.

T A B L E.

Shews the Number of my FEVER PATIENTS every Year from the 7th April, 1783, until the 30th April, 1789, on Shore; the Number of Deaths; and the Proportion of Deaths.

Years.	Number of Fever Patients.	Deaths.	Proportion of Deaths.
1783	67	2	1—33 near.
1784	43	4	1—10 near.
1785	60	7	1—9 and upwards.
1786	12	2	1—6
1787	12		
1788	10		
1789	24	3	1—8
	228	18	1—14 nearly.

C H A P. IX.

REMARKS on the OBSERVATIONS ON SHORE, and on the preceding TABLE.

IF the event of my shore practice in fever, had been the real consequence of my management of it, there would have been very little to say in its behalf, and much less to boast of success. But the reverse is the real

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fact;

fact; and I have been extremely particular in my statement, for the public good, and not from any self-interested motive, as will be readily granted me. Very little credit can possibly be derived from it, were I ever so solicitous for it. But nothing ought to stand in competition with the public good and truth.

After what I have already said, it is almost needless to explain to the reader the cause of my shore practice having been so unsuccessful. Of the eighteen deaths, one patient only had a chance given her to recover; but her constitution was so worn out with repeated attacks of enteritis, for two years, that medicine could not recover her, though I saw her from the moment she was seized with her fever. This was the case of profound coma, wherein musk was given. Other stimuli were also administered in this case ineffectually, as well as the bark and wine. Two more of the eighteen took bark; but they were so long ill before I was called in, that it had not a fair trial by any means. In most of the other cases, it was idle to expect medicine to relieve them—they were so near the fatal period before I was called in. One patient I thought might have recovered, though
I did

I did not see her until she had been ill several days, had she not been so obstinate as to refuse her medicine. The unsuccessfulness of this practice originated from my not having been called in sooner, and the obstinate disposition of the lower class of my patients; and when compared with the success of my practice on board of different ships, it holds out a very melancholy and important lesson to the community—to call in medical assistance, especially in fever, so early as to profit thereby; and not to delay until the physician, when he comes, can do no more than witness the patient's death, or tell the relations that there are no hopes of recovery.

I have always considered it as a vast advantage, which we enjoy in medical practice in the navy, that we are consulted so early in fever; that we see our patients so often; and that we have authority over them and their attendants, generally speaking. Indeed the patients themselves and the empire share in the advantage; and it confirms what I have already said, that “the sooner and more liberally bark is given in fever, the more effectual it will be.”

P A R T VI.

OBSERVATIONS *on* FEVER *on board* His Majesty's Ship SALISBURY, *from the 8th March 1786, until the 28th November 1788.*

I N T R O D U C T I O N.

ON a voyage to Newfoundland in time of Peace, so little occurs worth mentioning, that it would only be swelling the volume, and taking up the reader's time to insert a Monthly Review. And if our people had been ever so sickly, both the voyage and the island are so well known, that a review would have been unnecessary on those accounts. For the same reason I forbear inserting a review for the time the ship is at home, while employed on that service, which is seven months of the year; and the time of the passages out and home, and of the ship being at Newfoundland, is five months, without any material difference year after year: during our station, at least, it was so. Without further preface, therefore, I shall lay before the reader a succinct account of my Observations on Fever annually.

CHAP.

C H A P. I,

OBSERVATIONS *on* FEVER *in* 1786,

THE ship was commissioned the 1st of March at Portsmouth; and but few cases of fever occurred before our sailing the 18th of June; or upon the passage, until we got upon the Banks, when more complained and the measles appeared, which I am informed is not uncommon; and but few were seized with fever, while the ship lay at St. John's, where we arrived the 19th of July, and sailed the 25th of October for England. Upon the passage home we had also but few fever patients. We arrived at Spithead the 21st November.

When we arrived at St. John's, and while we lay there, the sick were sent on shore to the hospital. The treatment of fever patients there, being immediately under my own direction, was exactly the same as on board, respecting medicines.

From the 8th of March, the day of my appointment, until the 31st December, were
 Part VI, 31 fever

31 fever patients, besides being ill myself, all of whom recovered.

The inhabitants of St. John's were in general healthy this summer ; there being but very few fever cases, which I could hear of. A short time before we sailed, a seaman was sent to the hospital very ill of fever, who applied to the Commodore for relief, as he had been sent on shore by the master of a merchant ship, to which he belonged, because he was sick, which is a custom there on board of merchant men, by which means many a valuable life is lost to the public ; as probably would have been the case with this man, had not the Commodore ordered him to be entered on board the Salisbury, and to be sent to the hospital. And I have only mentioned this man, because it furnishes me with an opportunity to lament, that no provision is made at a place of so great trade and consequence as St. John's is, by the merchants and traders, for the many helpless objects of distress, who are often sent on shore from their vessels with virulent infection about them, where they frequently perish for want of food, as well as medical assistance. Their own interest, I mean the merchants and traders, as well as

the great cause of humanity, plead for an asylum being provided for those objects. The miserable agreement between the surgeons of the place and the fishermen, for *doctoring*, as they call it, cannot possibly entitle them to more care or medicines when they are sick, than the charitable disposition of gentlemen in narrow circumstances, as numbers of the surgeons there are, prompts them to bestow: and most of the seamen on board of the vessels have no agreement at all; but are sent on shore when they are taken ill to shift for themselves, where every thing is very dear: and in a short time they become beggars, if they are fortunate enough to survive their illness, for the vessels to which they belonged are failed on their voyage.

On the 2d August, a fire broke out in the woods on the South side of the harbour, on the road to Petty Harbour, which was got under and almost put out the 8th. In some parts it continued to smoke for some time. The Commodore went over and staid some days with our ship's company and officers, and the officers and troops of the garrison, to put it out. Some inhabitants assisted.

When we arrived the 21st of November at
Part VI. Spithead,

Spithead, after a bad passage, we had only rheumatic, scorbutic, and lame people on the sick list.

When I was ill myself, I took the bark freely with purgatives—bowel complaints being the most urgent symptom, and tinct. Thebaic. occasionally.

C H A P. II.

OBSERVATIONS *on board the* SALISBURY 1787.

WE sailed again from Spithead the 13th June, in company with the *Winchelsea*; and with one fever and one flux patient—9 in all on the sick list. After a very indifferent passage, in very foggy weather, and the wind dying away, we heard the surf beating on the shore the 14th July, and anchored. When it cleared, we found we were off the Bay of Bulls, and the next day we got safe into St. John's. The sick were sent on shore to quarters, because the hospital was ordered to be pulled down, which was done accordingly.

On the 31st October we sailed in company with the *Rose* for England, and arrived the 20th November at Spithead, and not a fever patient on the list. In firing the salute on our arrival, one of the gunners lost his hand, by loading a gun without spunging after it was fired.

In the months of January, February, March, April and May, a number of fever cases occurred, and were cured on board; but unfortunately I have mislaid the Diary for that time, which was kept by my first assistant: he was my first on board the *Blenheim*, and treated them exactly as I had directed him on board of that ship. However, I have an account of 64 fever patients who complained, and all recovered this year; 31 of whom complained in the months of June and July. Most of the young gentlemen were ill, and some of them were ill of fever several times. One of them, in whose case diabetes was the most distressing symptom, was extremely bad. I was then, and am still of opinion, that they were infected by the gunner, who was very ill, from his sloth and irregular manner of living, and really appeared to be a mass of infection.

Part VI.

In

In the latter part of the summer, a number of the lower class of inhabitants died, chiefly of fever, as far as I could learn.

One of our men died at sick quarters of mortification of his bowels. Upon opening the body, I found the liver greatly inflamed and enlarged; and the right lobe of the lungs much inflamed, and adhering strongly to the pleura; besides a mortification of the small intestines near the commencement of the colon. One of the Echo's people died at sick quarters of phthisis pulmonalis. Upon opening the body, the lungs appeared to be only a mass of enlarged tubercles in a state of supuration, and in many places adhering so closely to the pleura and ribs, as to be inseparable without tearing some of them.

C H A P. III.

OBSERVATIONS *on board the* SALISBURY, &c. 1788.

BEFORE the 28th June, when we sailed, a number complained of fever, and several were sent to the hospital. There were six on the list the 28th June; three of them were fever patients, and one pleuritic. The first fortnight of the passage was chiefly blowing wet weather, and it continued to be wet until 17th July; the latter part was very moderate and pleasant weather, and we anchored the 25th July in the narrows of St. John's harbour. On the 13th of July, one of the ship's company died of cynanche trachealis, who was taken ill the 3d. In warping the ship to her moorings, several men were hurt at the capstan, of whom one was sent with concussion of the brain to sick quarters; and 14 sick and lame on the 30th. The 19th August, one of the young gentlemen shot off his left hand, which was amputated above the carpus.

Part VI.

The

The lower class of inhabitants were very sickly all the Spring and Summer, and many died of fever. What contributed greatly towards their sickness was, a ship arriving early in the season with fever on board, and sending their sick on shore amongst the inhabitants.

An eminent surgeon of St. John's, to whom I recommended the bark treatment of fever, informed me, that it had succeeded in every case he had tried it: and another eminent surgeon, who was my first assistant on board the Salisbury the first voyage, 1786, and settled that year at St. John's, allowed it to be superior to any other method of treatment; but honestly acknowledged that he could not afford to administer it in common practice to his *agreement* patients.

This year we had 64 fever patients, besides myself, who was ill, and had a severe relapse. Dysenteric symptoms were the most urgent in my own case. More cases occurred in March than in any other month. They all recovered under my usual method of treatment.

We had more itch patients than I ever had

under my care, excepting on board of a seventy-four, in one cruise during the war.

The 27th October, we sailed from St. John's, in company with the Nautilus, and arrived at Spithead the 9th November, without a fever patient on the list, and were paid off the 28th November.

I have been so full on the treatment of fever in the former parts of this work, that I will not detain the reader any longer at present with what I have further to lay before him on that head; but refer him to my Essay on Fever, which will very soon be published.

C H A P. IV.

T A B L E.

Shews the Number of FEVER PATIENTS on board his Majesty's Ship the SALISBURY, from the 31th of March, 1786, to the 28th of November, 1788; and the Proportion of Deaths.

Number of Fever Patients.	Died.
159 *	None.
Proportion of Deaths.	None died.

* The contrast between the success stated in this and the Table of Part V. is so striking, as to attract every reader's attention, and shows mankind of how very high importance it is, to call in medical assistance at the commencement of fever; and to administer the bark then liberally, paying regard to the effects only, and not to the quantity or number of the doses, nor to the colour of the bark.

Of the cases which occurred in January, February, March, April, and May, 1787, the diary of which is mislaid, 19 were sent to Haslar hospital, who all recovered. Those sent to St. John's hospital were under my own care, therefore no notice is taken of them—but they all recovered.

C O N C L U S I O N.

I HAVE laid before the reader my observations on Jail, Hospital and Ship Fever for upwards of thirteen years; and having had a predilection for the subject, I have been the more attentive in forming them; and I hope it has been demonstrated, " That infection may be distinguished from any other disease," and that the reader will be impressed with the persuasion founded on experience, " That bark far excels all other remedies extolled for curing ship fever; and that delaying to administer bark early and liberally in fever, has hitherto been, and may be, productive of the most fatal effects to mankind." To support these assertions, irrefragable proofs were requisite, and I have adduced them in a series of facts, the result of long experience, extensive practice, and attentive observation.

My experience authorises me to repeat (as I never in any one case of ship fever on board the Edgar, Romney, Blenheim, nor

Salisbury, discovered petechiæ, though diligent search was made for them), that petechiæ is no pathognomonic symptom of ship fever, but solely depends on the constitution or on the management of the sick. Nor have I found, in any situation whatever, either from enquiry, or observation, ship fever to be so highly contagious and fatal, as to render ships at all unserviceable; but on board of such as the antiphlogistic method was practised. This is not meant as a reflection on the surgeons of ships—it can be none—because that method, with very few exceptions, has invariably been the universal practice, and, so far as I know, taught in the schools by every professor of medicine, one only excepted*; and it is, therefore, mentioned only to lament, that a practice so destructive should have been hitherto so universal.

When the unprejudiced reader, who is acquainted with the writings of physicians, wherein are expressed, and strongly inculcated, their apprehensions of the direful effects which are to follow an early and liberal ad-

* John Brown, and his doctrine I never heard of, until the end of December, 1786.

ministration of bark in fever, seriously considers the historical facts adduced in the Physical Journal, and preceding observations, in direct contradiction to those writings, he will necessarily be led to infer, "That the idea of
"the bad effects which they supposed were
"to ensue from the bark practice in fever, must
"have originated from false theories of their
"own or of their favourite professors or authors,
"and not from their own experience nor observation." He will also conclude, as the bark practice in the navy, where men labour under great disadvantages, and are more intemperate than on shore, has been found not only innocent, but effectual, when given liberally in the beginning of fever, even without any previous evacuation, and so far excels other methods of cure, as has been demonstrated by numerical calculations—"That the only objection, which
"prevents the practice from being adopted
"on shore, appears to arise from false theory,
"or to be grounded on unjust prejudice."

If, indignantly, refusing to hearken to reason on the most trivial subject be thought illiberal, how are we to judge of those who disregard facts which relate to the most interesting of all subjects, the preservation of
mankind,

mankind, only because they militate against their darling hypothesis?

Should the opponents to the bark practice retort my own words, respecting those who die under it, "That *some of their* patients died "only because *they* had not taken a sufficient "quantity of *their* medicines to effect the "cure;" and should I grant the position, it would only then place their practice in the most disadvantageous point of view; because it appears (in the comparative table of the success of different methods of treatment of fever) that for one patient who has died under the bark treatment, sixteen have died under the other methods of treatment; and in a vast number of instances, a much greater proportion. Indeed I have no doubt, but the bark will always be found superior to all other remedies in curing fever. At present, the view of the difference of the success of the different methods of treatment of fever, therefore, exhibits a very interesting object to mankind; but more particularly to Government. Because, though (from these and future observations) the bark treatment of fever may become general on shore, *the indigent establishment of the Naval Surgeons will never*
Part VI, *permit*

permit them to put it in practice in the Navy,

—The consequence is obvious——
——; and

The subject viewed in this serious light appears so alarming and so delicate, that a person in public service cannot prosecute it further than I have done in my Physical Journal, and in the preceding observations, where so many singular and striking facts are stated. I therefore present it, with all its importance, to those who have the power to remedy it, and, I trust, will soon put their power in force.

To these observations I might add many more, both of my own and of other gentlemen, who adopted the bark treatment upon my recommendation, were it not for fear of swelling the volume; and Mr. Cairncross, surgeon of the second battalion of the 73d regiment, obligingly furnished me with some very much to the purpose. But since it might be objected to these proofs, however valid or pertinent they may be, that they did not fall under my own observation, I purposely decline inserting them: and should the objection be still made to the few which I have inserted, I beg leave to answer, That

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as very few medical practitioners will ever have so many cases come under their care, as are comprehended in the preceding observations; and as few readers, from their own experience, will have reason to deny their validity, I trust, they will not be more rash to condemn, nor to reject them from prejudice or hear-say, than I have been to obtrude on them the observations of others.

But, for the validity of my observations, I readily appeal to their candour who have had equal opportunities to make observations, and to compare the success of various methods of cure. To such observations as are fully and fairly stated, I will pay all due respect; but (*nullius addictus jurare in verba magistri*) I pay no regard to names or to hypotheses, be they ever so splendid or authoritative.

In a word, I am perfectly satisfied that every practitioner may be fully convinced of the truths stated in the preceding observations, if they will take proper steps; *i. e.* if, divesting themselves wholly of prejudice, they will make a conscientious trial of the bark treatment of fever, as I have done, and compare the success with that of all other

Part VI.

methods

methods which have been hitherto adopted ; recollecting, that to make the trial properly, it must be an invariable rule *to give the bark liberally and early, so early as, in a manner, to prevent the fever, and to be guided only by its effects, without regarding its colour, the quantity or number of the doses*, as already mentioned.

In stating my observations I have been more studious to be accurate and distinct, than ambitious to obtain the character of a fine writer ; and, satisfied that I have stated important facts, I shall think myself happy if I have done it intelligibly, and still happier if it shall be found that I have contributed to the preservation of my fellow-creatures, with the hopes of which I may reasonably flatter myself, unless I can be persuaded that the *nature* of infection and the *properties* of bark shall hereafter entirely change.

Finally, after having served Government near thirty years, and sacrificed a good constitution by frequent attacks of fever, incurred by attending my duty in various climates ; the only recompense which I enjoy for the irretrievable loss of that blessing, is the reflection that I have been, and I
trust

trust shall be, under Providence, instrumental in preserving many lives, which, in all human probability, would have fallen victims to a contrary practice : a recompense that, were it possible, would be too cheaply bartered for any thing in the power of man to bestow.

F I N I S .



E R R A T A.

- Page 197, for 27th, in the last line, read 37th.
 — 209, line 9, for *hammac*, read *hammacoe*.
 — 213, — 10, for *sumatur*, read *sumat*.
 — 219, — 14, for *atque*, read *cum*.
 — 220, — 5, after *C. C. gr.* read *v.*
 — 234, — 15, for *potione*, read *potionem*.
 — 247, — 15, after *life*, add a comma.
 — 287, — 7, for *would*, read *will*.
 — 293, — 12, add *The thermometer was between 52 and 64.*
 — 303, — 16, for *every one*, read *the inhabitants*.
 — 316, — 22, after *thirty*, read *We got forty-three men out of a cartel ship from Spain, on board of which were thirty ill of fever. On my application the forty-three men were stripped naked, &c.*
 — 319, — 15, for *us*, read *the Edgar*, and for *our*, read *the*.
 17, after *the*, read *enemy's*.
 18, dele *to us*.
 — 349, — 2, after *along*, add a comma.
 — 366, — 12, after *sudorifics*, read *are*.
 13, after *repeated*, read *after the first or second night*.
 — 371, — 1, after *ourselves*, read *in others*.
 — 415, — 14, for *upset*, read *overset*.
 19, after *and*, read *each of them a dose of*.

N. B. Wherever the Author has spoken of himself in the plural, throughout the work, as *we*, *ourselves*, *our*, &c. the Reader is requested to substitute *I*, *myself*, *my*, &c.